

AES

HAM RADIO CATALOG

FALL / WINTER 2000-2001

HF fun for the whole family!

ICOM®

AMATEUR ELECTRONIC SUPPLY® LLC

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Amateur Radio

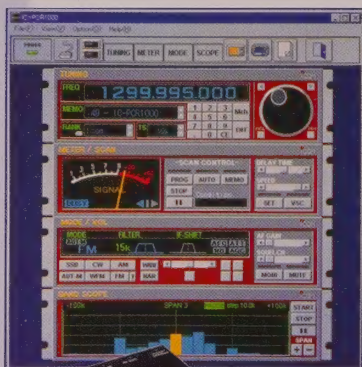
Internet www.aesham.com

E-mail info@aesham.com

Toll Free 1-800-558-0411

ORDER TOLL FREE 1-800-558-0411

6:00 A.M. Pacific to 8:30 P.M. Eastern
Monday - Friday • Saturday to 6:00 P.M.



IC-PCR1000

The original "black box"

- 100 kHz - 1.3 GHz[†]
- AM, FM, WFM, USB, LSB, CW
- Unlimited Memory Channels
- Real Time Band Scope
- IF Shift
- Noise Blanker
- Digital AFC
- Voice Scan Control*
- Attenuator
- Tunable Bandpass Filters
- AGC Function
- S Meter Squelch
- CTCSS Tone Squelch
- Large Selection of Tuning Steps & Scans
- External Speaker Level Control
- DSP Optional

With plug 'n play installation and easy to use interfaces, the IC-PCR1000 and IC-PCR100 let you tap into the world of wireless communications - from marine and aviation communications to radio and TV broadcasting all from your PC!

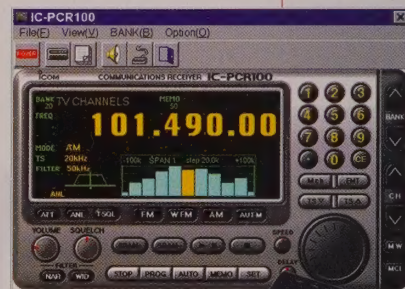


IC-PCR100

Much like its big brother, but for less

- 100 kHz - 1.3 GHz[†]
- AM, FM, WFM
- 1000 Memory Channels

Plus many of the same features & performance as the IC-PCR1000



"The PCR1000 has something to intrigue and satisfy everyone. This is a fun product." - QST, 7/98

*VSC when activated, stops only on modulated signals.

IC-PCR1000 requires Microsoft® Windows® version 3.1 or Windows® 95

IC-PCR100 requires Microsoft Windows® 95 or Windows® 98

Download and demo the latest software for free at <www.icomamerica.com>

DOWNLOAD RIGHT FROM THE WEB FREQUENCIES

ICOM makes it easy to get the frequencies you want. Our database searches your area. You download the frequencies to your computer and easily load them into your ICOM radio. Optional software and PC connection cable required.

IC-R3*

Coming Soon!

See & hear the action

- 500 kHz - 2.45 GHz[†]
- 2" TFT Color Display
- CTCSS
- 450 Memory Channels
- Attenuator
- And Much More



IC-R10

Advanced performance & features

- 500 kHz - 1.3 GHz[†]
- All Mode
- Alphanumeric Backlit Display
- Attenuator
- 7 Different Scan Modes
- Beginner Mode
- 1000 Memory Channels
- Band Scope
- Includes AA Ni-Cds & Charger



IC-R2

Excellent audio, tiny package

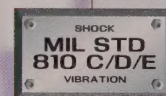
- 500 kHz - 1.3 GHz[†]
- AM, FM, WFM
- Easy Band Switching
- CTCSS Decode
- 400 Memory Channels
- Priority Watch
- MIL SPEC 810 C/D/E
- Weather Resistant
- Includes 2 AA Ni-Cds & Charger



Most ICOM rigs are PC programmable with select ICOM options



The IC-R10 & IC-R2 meet



IC-R3 test pending

*This device has not been approved by the FCC and may not be sold or leased, or offered for sale or lease, until approval of the FCC has been obtained.

The IC-R75 covers a wide frequency range allowing you to listen in to a world of information. With innovative features like twin passband tuning, synchronous AM detection, DSP capabilities, remote PC control and more - shortwave listening is easier than ever. All this comes in a compact, lightweight package that can be conveniently used in your ham shack, den or car.

IC-R75

Pull out the weak signals

- 100 kHz - 60 MHz†
- Commercial Grade
- Synchronous AM Detection (S-AM)
- Optional DSP with Auto Notch Filter
- All Mode
- Triple Conversion
- Twin Passband Tuning (PBT)
- Large Front Mounted Speaker
- Large Display
- Well Spaced Keys and Dials
- 1000 Memory Channels
- Up to Two Optional Filters
- PC Remote Control with ICOM Software for Windows®.



"A versatile HF/6-meter receiver that offers a good measure of performance in a compact package. All mode capability for the ham and utility listeners and synchronous AM for the SWLs should make the IC-R75 a popular choice for a wide variety of radio enthusiasts."

—QST, 1/00

download frequencies
right from the web

www.icomreceivers.com

log on > download > listen in

ICOM technology brings you super wide band, all mode coverage from HF to 2GHz, including shortwave and VHF/UHF, while maintaining a constant receive sensitivity. The IC-8500 is not simply a scanner - it's a professional quality communications receiver with versatile features from high speed scanning to computer control.



IC-R8500

The experts choice

- 100 kHz - 2.0 GHz†
- Commercial Grade
- All Mode
- IF Shift
- Noise Blanker
- Audio Peak Filter (APF)
- Selectable AGC Time Constant
- Digital Direct Synthesis (DDS)
- 1000 Memory Channels
- RS-232C Port for PC Control*

"If you want a receiver that is both a superior world band radio and a solid scanner, the ICOM IC-R8500 is the best choice." — Passport to World Band Radio, 1998

†Cellular frequencies blocked; unblocked versions available to FCC approved users.

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www.icomamerica.com

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USED

demo

& Returned GEAR



Current list available at

www.aesham.com

Or call toll free

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Cleveland	1-800-321-3594
Orlando	1-800-327-1917
Las Vegas	1-800-634-6227



USED EQUIPMENT/DEMOS & RETURNS

USED EQUIPMENT Fully service tested trade-ins • 10 day trial (pay only shipping charge) • 30 day guarantee • Full trade-in credit within 90 days on higher-priced new equipment

DEMOS & RETURNS Fully serviced tested demonstrator, display or restocked new equipment • Repacked in original cartons • Full manufacturer's warranty • Note: used equipment policies do not apply

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USED EQUIPMENT

+ = additional accessories not listed

ADI

AT200/HP 2M HT.....109.99f
AT400/HP 440 HT.....109.99f
AT600 2.5W 2M/70CM HT.....189.99f

ALINCO

DRM06TH 6M 20W XCVR.....199.99c
DR140T0 2M XCVR.....149.99f
DX77T HF XCVR.....659.99mcf
EDC6 CHARGER.....9.99m

AMERITRON

AL1500 1.5KW HF AMP.....1,719.99m
AL80A HF AMP/10M/220V.....769.99c
QSK5 T/R SWITCH.....239.99f

ASTRON

RS20A P/S BENT CHASSIS.....69.99f
RS35A 25A POWER SUPPLY.....119.99f
SL11A 7A POWER SUPPLY.....59.99f
I2-115 POWER INVERTER.....38.99c

ASTATIC

TUG9D104 MICROPHONE.....59.99f

COURIER

M54 VHF HT (151.625 MHz) 149.99m

DAVIS

7852 RAIN COLLECTOR.....69.99f

DIAMOND

DPGH-6 2/6M 21' AS IS.....118.99c

DRAKE

MS8 SPEAKER.....39.99m
R8 RCVR.....679.99m
R8 RX W/150 VHF CONV.....779.99c
R8A SWL RX/CONVERTER.....919.99f

ESP

KLR2000A 2KW LINE COND.....75.99m

ICOM

AD15A CHARGE ADAPTER.....19.99f
AD56 ADAPTER.....14.99f
AH2B MOUNT/WHIP.....99.99c
AH3 AUTO ANT TUNER.....299.99f
AT150 100W AUTO TUNER.....349.99f
AT500 AUTO ANT TUNER.....399.99f
EX1514 VOX UNIT.....49.99m
EX2 Relay box (AS-IS).....20.99mcf
FL103 SSB FILTER.....79.99m
IC12H 2M HT.....109.99f
ICW32A 2M/440 HT.....249.99f
IC207H 2M/440 MOBILE.....249.99m
IC271A 2M FM/SSB XCVR.....549.99f
IC271A 2M FM/SSB/AG-20.....569.99c
IC271H 2M XCVR/UT15+.....749.99m
IC275A XCVR/AC SUPPLY.....849.99c
IC275A XCVR/UT34.....819.99m
IC275A 2M XCVR.....799.99mcf
IC275H 100W 2M XCVR.....919.99f
IC3200A 2M/440 FM XCVR.....249.99m
IC3220H 2M/440/UT50.51.....349.99c
IC471A 440 MHz/ALL MODE 599.99m
IC471H 70CM XCVR/PS35.....849.99m
IC471H 70CM/PS35/NT.....829.99c
IC475A 70CM XCVR/UT34.....819.99m
IC575A 10W 6M/10M XCVR.....799.99c
IC706 HF XCVR/MB62+.....1679.99m
IC706 HF/6M/2M XCVR.....599.99c
IC706MKII HF/DSP/FL100.....739.99m
IC707 HF XCVR.....454.99f
IC707 HF XCVR/UIT.....539.99m
IC725 HF/MB23+ SCUFFED.....599.99m
IC725 HF/MB5+ SCUFFED.....524.99m
IC725 HF XCVR/UIT.....559.99f
IC728 HF W/FL101.....649.99m
IC728 HF XCVR.....629.99mcf
IC728 HF XCVR/FL100.....649.99m
IC728 HF XCVR/UIT(FM).....649.99m
IC729 HF XCVR/FM.....869.99mcf
IC729 HF/FM/TONE.....929.99m

IC735 HF XCVR.....659.99mcf
IC735 HF/CW NO DOOR.....649.99f
IC735 HF XCVR/FL32.....689.99m
IC735 HF NO MIC/NO DOOR 629.99f
IC735 HF XCVR/SCUFFED.....634.99m
IC736 HF XCVR/6M.....1,059.99mcfv
IC736 HF/SM8 DESK MIC.....1,099.99m
IC737 HF XCVR.....799.99mcf
IC737A HF XCVR.....899.99c
IC737A HF FL52A/FL100.....949.99m
IC737A HF/FL101/FL53A.....1,039.99m
IC738 HF XCVR.....899.99mcf
IC738 HF XCVR/UT30.....919.99m
IC751 HF XCVR.....949.99f
IC751 HF XCVR/FL32.....679.99f
IC751A HF/RC10/SMOKE.....699.99m
IC756 DSP HF XCVR.....799.99mcf
IC756 DSP/FL101/FL222.....1,759.99m
IC756 DSP HF/FL101+.....1,759.99f
IC756 DSP HF/FL1232+.....1,699.99c
IC756 DSP HF/FL52A/2+.....1,799.99m
IC756 HF/FL222/CR502.....1,739.99m
IC756 HF XCVR/SCUFFED.....149.99m
IC775DSP/FL223/222+.....2,799.99m
IC775DSP/FL223.....2,749.99f
IC820H 2M/440 FM/SSB.....799.99m
MB12 MOBILE MOUNT.....19.99f
OPC581 CABLE.....48.99f
OPC581/MB63 SEP KIT.....34.99m
PS55 POWER SUPPLY.....159.99mcf
PS85 COMPACT P/S.....199.99mcf
R1-15 RCVR/BLOCKED.....199.99c
R7000/CK-70/800MHZ.....1,029.99f
R7000 25-2000MHZ RX.....999.99m
R7000 25-220Z/CK-70.....1,019.99f
R71A PBT SWL RCVR.....599.99c
R71A SWL RX/EX257/EX310.....619.99m
R71A SWL RX/RL44A/RC11.....619.99m
R7100 COMM RCVR.....1,199.99mcf
R7100 RCVR/SVC MAN.....1,239.99m
R7100 25MHZ-2GHZ RX+1,229.99mcf
R75 SWL RCVR.....559.99c
LARSEN
NMO150B COIL ONLY.....14.99m
MFJ
1270C PACKET TNC.....104.99m
1272MX TNC MIC SWITCH.....22.99c
1704 4 POSITION SWITCH.....49.99m
407B ELEC KEYS.....55.99c
4112 POWER PACK.....49.99f
4125 POWER SUPPLY.....69.99m
492 192 CR MEMORY KEYS 69.99m
5106 6-PIN MINI - OPEN END.....3.99m
752C SSB/CW FILTER.....69.99f
9020 20M CW XCVR/412/726191.99c
9030 30M CW XCVR.....119.99c
9120B 20M CW PKG.....259.99c
916 2 MTR/440 DUPLEXER.....26.99f
921 2M/220 TUNER.....49.99f
9406X 6 METER XCVR.....189.99f
956 SWL TUNER.....29.99m
962D TUNER.....199.99mcf
989C TUNER AS-IS.....199.99m
MIRAGE
KP12/2M PREAMP.....109.99f
KP2/2M PREAMP.....129.99f
NCG
MH900PK EAR/MIC.....29.99c
PATCOMM
PC16000HF XCVR.....799.99mcf
PERIPHEX
FNB27 BATTERY(YAESU).....19.99m
PB14S BATTERY.....34.99c
SANGEAN
ATS18CS RCVR/NO REC.....149.99m
SGC
PS30 30/40 UNREG PS.....319.99c

0410 SG2000/POWER.....1,299.99mcf
0501 SG2020 HF XCVR.....539.99f
5412 SG230 TUNER.....389.99m
5415 AUTO TUNER.....819.99m
SONY
ACE604 AC ADAPTER.....14.99m
STANDARD
C1208DA 2M XCVR/NO MAN 359.99c
C178A 2M/440 HT.....229.99c
C178A 2M/440 HT/CMU161 249.99c
C558A 2M/440 HT.....189.99f
TRIPP LITE
PR30 30 AMP P/S.....103.99c
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BC860XLT SCANNER.....151.99c
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WASHINGTON CB.....194.99f
WASHINGTON CB NO MAN.....184.99f
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VC300D 300W ANT TUNER.....139.99f
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CSC29 SOFT CASE.....14.99c
CSC62 CASE.....12.99c
CSC67 SOFT CASE.....15.99c
CT-62 CAT INTERFACE CABLE23.99c
CT26 MIC ADAPTER.....15.99m
FB43 CHARGING SLEEVE.....19.99c
FB48 BATTERY.....34.99m
FC800 LONG WIRE TUNER.....329.99m
FL7000 HF SS AMPLIFIER.....1,679.99f
FP1030A POWER SUPPLY.....199.99m
FP7510D POWER SUPPLY.....219.99c
AD1608B SWL RCVR.....439.99mcf
FT1000 HF XCVR/BPFI+.....2,619.99c
FT1000D HF W/XF455MC+3,039.99c
FT1000H HF XCVR.....2,879.99m
FT1000MP 100W XCVR.....1,889.99mcf
FT1500M 2M FM MOBILE.....143.99f
FT4700RH 2M/440 XCVR.....299.99c
FT5100 2M/440 XCVR.....299.99m
FT712RH 35W 440 FM.....269.99f
FT712RH/FTS12 UHF.....299.99m
FT730R UHF XCVR.....249.99m
FT747GX HF XCVR.....549.99c
FT747GX HF XCVR/FM UNIT.....569.99m
FT757GX MKII HF XCVR.....479.99f
FT767GX HF XCVR.....999.99m
FT767GX HF XCVR/2M.....1,049.99mcf
FT767GX HF/2M/440.....1,099.99m
FT767GX HF XCVR/6M.....1,049.99c
FT800R 2M/440 XCVR.....349.99c
FT890/AT HF XCVR.....799.99f
FT890/AT HF/YF100.....839.99f
FT990 AC HF XCVR.....1,259.99mcf
FT990 AC HF/250HZ/2KHZ 1,319.99f
FT990DC HF/SSB FILTER.....1,059.99f
G450A ANTENNA ROTOR.....207.99c
MD100A8X MICROPHONE.....99.99mcf
MH31B8 MIC/FT1000MP.....31.99m
MMB38 MOBILE MOUNT.....12.99f
MMB54 MOBILE MT.....19.99c
MMB67 MOUNTING BRACKET 19.99m
MR1000 QUADRA RACK MT 239.99c
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NC34B CHARGER.....9.99m
NC42 DROP-IN CHGR.....69.99f
PA17 BATTERY EXT. CABLE.....39.99f
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SP8 SPEAKER/L7.....149.99m
YM50 MICROPHONE.....39.99m
YSK100 SEPARATION KIT.....49.99m

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ARC-12 SMART CHARGER.....59.99f
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AR147+ 2M XCVR.....206.99c
AT201HP 2M HT.....164.99mcf
AT600 2M/440 HT (2 WATT) 249.99f
AT600HP 2M/440 HT.....272.99mcf
PROG600 SOFT/CABLE.....35.99f
PR52 6M HT.....199.99m
RBP612NMH 13.2V NIMH.....71.99f
SLC600L CASE FOR AT-600H.18.99f

AEA

AC4 POWER SUPPLY.....17.99c

AEA/TIMEWAVE

WEFA256 SOFTWARE.....116.99v

AIM

38-384 POWER SUPPLY.....34.99m

ALINCO

DJG1T 2M HT.....99.99m
DJG5TH 2M/440 HT.....259.99m
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DJ55TH 2M/440 HT.....249.99m
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DJ180TH 2M HT.....143.99c
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DJ280TH 220 HT.....169.99m
DM340MVT POWER SUPPLY 159.99m
DRM035X 10M XCVR.....159.99m
DR140PTK 2M XCVR.....149.99v
DR140T 2M XCVR.....149.99m
DR610T 2M/440 XCVR.....429.99m
DX70TH HF/6M XCVR.....749.99m
DX77T HF XCVR.....749.99m
EBP36N BATTERY.....61.99c
EDC34 DESK CHARGER.....69.99m
EDC60 QUICK CHARGER.....71.99v
EDS2 CABLE.....19.99f
EME13 HEADSET.....63.99mcf
ESC18 CASE.....12.99m
ESC29 CASE.....9.99c
ESC30 CASE.....9.99c
MB110 BRKT.....17.99v

AMECO

HP300T HI PASS FLT.....10.99mcfv
PT3 PREAMP.....112.99c

P12T DC PS FOR PT3.....8.99v
P12T 110VAC/12VDC.....8.99c
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AL800 AMP.....1,376.99c
ARB700 RELAY.....24.99mcf
ARB702Y AMP RELAY.....34.99m
ATR30 TUNER.....499.99f
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RCS4 SWITCH.....99.99m

ANTENNA SPECIALISTS

AP143 2M ANT.....62.99c

AOR

AR16B RCVR.....179.99mv
AR3000A RCVR.....999.99m
AR3000A RCVR (NO ANT).....989.99m
AR7000B RCVR.....1,049.99m
AR8200B HT RCVR.....449.99m
SC8200P CASE.....9.99m

ASTRON

RS10A POWER SUPPLY.....62.99c
RS7A 5AMP PS.....53.99v
SS30M POWER SUPPLY.....125.99m
VS50M POWER SUPPLY.....233.99c

AZDEN

AZ11 10M HT/AS-IS.....199.99m
PTT01 PTT SWITCH.....34.99mcf
SDX514W SPK/MIC.....44.99m

B&K

114A MULTIMETER.....34.99m
820 TEST EQUIPMENT.....199.99m

B&W

AS160 ANTENNA.....139.99c
AS40 10-10 TRAP DIPOLE.....139.99c
BWDS1.830 ANTENNA.....259.99m
FL10/1500 LOWPASS FILTER 69.99m

BAYGEN

FPA3 ADAPTER.....9.99mcfv
FPR1B CRANK RCVR.....59.99m
FPR2GSW CRANK RADIO.....89.99m

BENCHER

BY1 KEY.....89.99m
BY3 KEY.....249.99m
BY2 CHROME PADDLE.....99.99m

CES

SSI68 PATCH.....199.99m

CHANNEL MASTER

HD9515A ROTOR.....119.99m

CHEROKEE

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AH27F CB HT.....107.99c
AH50SF 6M HT.....124.99m
COBRA
FRS200 FRS HT.....39.99m
HH38WXST CB HT.....71.99c
SR11 SCANNER.....59.99f
COMMUNICATION SPECIALISTS
DT0-1 DTMF DECODER.....44.99c
TS32P ENCODER/DECODER.....44.99f

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CF360A DUPLEXER/LEADS.....62.99v
CF706 DUPLEXER.....59.99m
CYA240 2M/440 BEAM ANT.....89.99v
GR5M TKN LIP MT W/COAX.....60.99mv
MH510 TRIBAND DUCK/SMA 34.99m

COURIER

MU510 BUSINESS HT.....269.99m
M54 5W W/151.625.....179.99f
PROCCOM/C COMMERCIAL HT99.99m
U22A UHF HT.....119.99mcf
U22B UHF HT.....119.99m

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CS800 INTERCONNECT.....329.99m

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LAC4NH ARREST.....39.99v
R80 KIT.....124.99mv

DAIWA

KN106 WATTMETER.....89.99c

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K540 MOUNT.....29.99m
K550MK LUGGAGE MOUNT.....62.99v
K601M HIDE-TRUNK MOUNT 62.99c

K601NMO MOUNT

SK100 HF-6M MTR.....119.99c

DIGIMAX

D500 COUNTER.....109.99f
D510 COUNTER.....119.99f

DRAKE

R8A SWL RCVR.....899.99mv
SW8 SWL RCVR.....729.99f

EMERSON

EA3000 TV ANTENNA.....44.99m

FORBES

VENTENNA 2M/440 ANTENNA 49.99m



A portion of the Used Equipment inventory in Milwaukee
Current List available at www.aesham.com or Call Toll Free



DEMOS & RETURNS

GARMIN	IC22A 2M HT/CIG/SPK/MIC 290.99v	SMC34 SPEAKER/MIC.....35.99v	205 RESIS FET/METER/NO MAN.....69.99m	SPM500 THROAT MIC.....49.99mv	PC78XL CB XCVR.....99.99m
GPS38 GPS RCVR.....149.99f	IC78A/HW 5P 6M/2M/440 HT.214.99mf	THD7A 5W 2M/440HT.....359.99mv	224 2M FM SIG ANALYZER.....134.99v	SPM502 THROAT MIC.....54.99m	PRO340XL CB HT.....34.99mf
GENESYS	IC706MKII XCVR.....719.99f	TH22ATH 2M HT.....199.99m	250X DUMMY LOAD/NO OIL.....34.99m	TA2 MOUNT.....9.99m	PRO350XL CB HT.....69.99v
CT221KE EARTALK.....49.99m	IC2GXAT 2M 3W HT.....189.99mc	TH42AT 70CM HT.....239.99m	259B ANT ANALYZER.....215.99c	RANGER	SC150 SCANNER.....143.99c
T05H THROAT/MIC.....39.99m	IC2800H 50W/2M/35W 440FM 485.99v	TH79A(D)K 2M/440 HT.....339.99m	407D KEYS.....59.99m	RC11000 /G COMM HT.....79.99mf	VANCO
GROTHE	IC707 HF XCVR 100 WATTS 589.99mf	TM7D00A 2M/440 XCVR.....539.99f	4114 POWER PACK.....58.99v	RC11000 /R COMM HT.....79.99f	P122B ADAPTER.....4.99m
VS2 SIREN.....69.99m	IC718 HF XCVR.....629.99c	TS570D(G) HF XCVR.....1,044.99mcf	415B CW ADAPTER.....44.99m	RC12950 10 & 12M XCVR.....224.99c	VECTRONICS
GRUNDIG	IC7750SP 200W HF XCVR 3,249.99f	UZLFI48 FRS RADIO.....89.99c	447 SLIMLINE KEYS.....71.99v	RC1900 MARINE XCVR.....99.99m	AT100 ACT ANT.....64.99mv
MINI100PE SWL RCVR.....34.99m	IC821H 2M/440 XCVR.....1,259.99mv	LABSEN	451 CW KEYBOARD.....89.99m	RF APPLICATIONS	HF600QSK AMPLIFIER.....1,319.99m
TRAVELLER III DIG SWL RX.....89.99c	LC125 CASE/IC22A.....27.99v	KD42/70 DUAL DUCK ANT.....24.99m	462B MULTI-READER.....149.99mf	P2000A SWR METER.....269.99mc	HPF1 FILTER.....14.99m
YACHTBOY 230 SWL.....71.99m	LC128 CASE/CW32A.....34.99c	KG144UDPL 2M ON-GLASS.....62.99mv	490 KEYS/PADDLE COMBO164.99m	RF CONCEPTS	PL2500 LOWPASS FILT.....71.99v
YB300PE SWL RCVR.....89.99m	LC137 CARRYING CASE.....34.99c	NMO TLP TRUNK MOUNT.....26.99c	5060VY CABLE.....17.99m	UHF50 3/50W UHF AMP.....134.99v	PM300V VHF/UHF MTR.....79.99v
HEIL	LC147 CASE.....19.99m	NMOMM NMO MAGNET MT.....26.99v	5080 MFJ-YAE 8P CABLE.....9.99m	VHF160 2M 1/60W.....99.99m	VC300DLP ANT TUNR.....134.99c
CC11 HM10 4 PIN CABLE.....26.99v	MB63 MOUNT.....16.99m	NMO150TLM 2M ANTENNA.....45.99v	5080MYV TNC CABLE.....12.99m	223 2M 2/30W NEW.....89.99f	VERTEX
GM5 MICROPHONE.....124.99m	MB65 MOUNT.....29.99m	NMO270/MM ANT/MAG MT.....79.99m	5084 TNC/ICOM 8P.....13.99mc	RF INQUIRY	FTL2011/99 VHF LMR XCVR.....399.99m
HMP-M INLINE MIC PREAMP.....49.99c	MB65 MOUNTING BASE.....31.99v	M SQUARED (MF)	5086 KENWOOD/ALINCO 8P.....11.99mv	CF5KVUHF COM MODE FILT.....112.99v	VHF LMR HT/NO CHGR.....149.99m
PROMICRO5 HEADSET.....89.99f	M10A MARINE HT.....159.99m	EB432 EGGBEATER ANT.....107.99m	5086YV CABLE.....11.99m	ROSETTA	VX200(1)X LMR HT/NO CHG.199.99m
HUSTLER	M2 VHF MARINE HT.....149.99mc	MAGELLAN	5383K INTERFACE CABLE.....44.99v	RMS CN220 HF-220 METER.....89.99c	VX200(4)X LMR HT/NO BATT199.99m
G71504 2M ANTENNA.....179.99m	OPC598 23' EXT. CABLE.....65.99v	GPS315 GPS UNIT.....134.99c	5414 RS232 CABLE.....7.99m	SANGEAN	VX200(4)X LMR HT/NO CHG.279.99m
HYGAIN	PS85 POWER SUPPLY.....269.99mv	0069038000 PIC KIT.....89.99m	64113 CHARGER.....44.99m	ATS404 SWL.....89.99m	WILSON
5146710 MAST ADAP.....69.99m	R1-15 RX CELL BLOCKED.....269.99mf	MAHA	641K CHGR/KENWOOD.....44.99v	TD200V RCVR.....69.99m	TRUCKER2000 ANTENNA.....49.99m
ICOM	R10-05 RX CELL BLOCKED.....319.99mcf	MHB132 BATTERY.....49.99m	731 RF FILTER FOR SWR ANA80.99v	SGG	WINEGUARD
AD51 CHARGE ADAPT.....9.99mv	R10-05 RCVR/LC140.....329.99m	MHB8P8 8.4/1.8 NIMH.....59.99m	78 REMOTE FOR MFJ492.....17.99v	SG235 TUNER.....1,049.99m	GS2000 TV ANT.....69.99m
AD81 ADAPTER.....12.99m	R8500 RCVR.....1,349.99m	MHFN827 900MA 12V YAESU.....53.99v	781 DSP FILTER.....99.99m	5296 POWER CUBE.....1,049.99m	LB2000 DUAL LNB.....69.99m
AH4 TUNER.....289.99mf	SP20 SPEAKER/AUDIO FILT.....224.99v	MHS11 ICO ADPT/A302.....6.99m	8100W SW REGEN RCVR.....79.99v	5417 HF+6M SMARTTUNER.....476.99v	W2AU
BC119-11 DESK CHGR.....89.99f	SP7 SPKR.....74.99m	MHVOXS SPKR/MIC.....34.99m	815 1.8-60 MHZ SWR/WATT.....71.99cf	7007 POWER CLEAR DSP.....319.99mv	BEAM BALUN.....19.99m
BC79 CHARGER.....119.99c	UT106 DSP.....134.99c	MH101Y2 CHARGER.....59.99m	817 SWR/MEER.....80.99c	SHAKESPEARE	KW80F 75M PHONE ANT.....43.99v
BP121 7.2V/400MA.....34.99v	ISOTRON	MH244 CHARGER.....10.99c	924 440MHZ ANT TUNER.....62.99v	495 MARINE ANT MOUNT.....15.99v	W5VI
BP132 BATTERY.....79.99m	ISO15 15M ANTENNA.....61.99f	PB17 BATTERY.....62.99f	9406 6M SSB XCVR/NO MIC.199.99m	SONY	W5V NCVS N/C VIDEO (OLD).....15.99v
BP157 900MA 7.2V.....59.99c	JPS	FRS114 FRS HT.....44.99mc	9440X 40M XCVR.....206.99c	ICF51CPC SCANNER.....197.99cv	X-10
BP173 BATTERY.....124.99m	NF60 DSP/NOTCH FILT.....89.99m	MX49FX 49 MHZ XCV.....44.99mcf	959B RCVR ANT TUNER/PRE.89.99v	ICFSW30 SWL RCVR.....79.99m	DS7000 SECURITY SYSTEM.139.99m
BP197 BATTERY.....19.99m	NIR-10 FILTER.....169.99mf	MX49H 5CH 49MHZ XCVR.....44.99v	989C ANTENNA TUNER.....289.99m	ICFSW33 SWL RCVR.....134.99m	YAESU
BP199 BATTERY.....63.99c	NIR12 DSP FILTER/NO MAN.299.99f	MX50 40MHZ HT.....44.99m	MIDLAND	ICFSW55 SWL RCVR.....299.99m	ATAS100 ANTENNA.....289.99m
CK70 DC CABLE.....35.99c	NIR12/SDK DSP FILTER+.....349.99m	PK50 CB HT.....59.99f	22430 THROAT/MIC.....29.99m	ICFSW7600G SW RCVR.....161.99c	CA10 CHG ADAPTER.....11.99m
CO12 CIG CABLE.....29.99m	NRF7 FILTER.....129.99m	MFJ	75510 FRS RADIO.....59.99m	ICFSW77 SWL RCVR.....419.99cv	CN3 BNC/SMA ADAPTER.....7.99m
CP10 CABLE.....9.99m	KANTRONICS	1020B INDOOR ACT. SWL ANT 62.99v	75510 FRS/BROKEN CLIP.....49.99m	STANDARD	CSC67 SOFT CASE FT51/LP.....16.99v
CR282 STAB CRYSTAL.....134.99m	DATAENGINE.....152.99c	1040B RX PRESELECTOR.....89.99v	75510XLB FRS.....69.99c	CLC151 CASE.....14.99v	CSC69 FOR FN640.....13.99m
CSWHH SOFT W/CABLE.....45.99c	KENWOOD	1214PC TNC.....125.99mc	MIRAGE	CNB173 BATT.....84.99m	CSC71 CASE.....14.99m
CSWHRX SOFTWARE.....44.99m	BT11 BATTERY PACK.....16.99c	1224 INTERFACE.....89.99m	B215G 150W 2M.....299.99mf	CNT5600 TONE UNIT.....14.99m	EDC12 DC ADAPTER.....34.99m
F4S UHF LMR HT.....229.99m	DFK4 CABLE.....49.99f	1272B TNC/MIC SWITCH.....35.99m	B23 2M 2/30W AMP.....89.99v	C108A 2M HT.....129.99m	EDC5B CIG CABLE.....24.99m
F4S UHF LMR HT/NO ANT.....219.99m	FI10D INTERFACE.....80.99v	1272MYH TNC/MIC SW.....35.99v	B23G 2M 2/30W AMP.....119.99v	C168A 2M HT.....249.99m	FBA12 BATTERY.....14.99m
HM46 SPEAKER/MIC.....39.99f	KNB7A 800MA 12V BATTERY.69.99m	1278 TNC/PLAIN.....249.99m	B2516G 2M AMPLIFIER.....239.99m	C178A 2M/440 HT.....269.99m	FBA14 BATTERY CASE.....14.99m
HM65 SPEAKER/MIC.....66.99v	KSC14 CHAER.....78.99c	1285 IBM SOFTWARE.....14.99m	B510G AMPLIFIER.....188.99c	C188A 2M HT.....199.99f	FBA20 BATTERY PACK.....17.99m
HM90A WIRELESS MIC.....119.99m	MC52DM MICROPHONE.....71.99c	1287BD DISK ONLY.....5.99m	C22G 220 AMPLIFIER.....119.99m	C188A 2M HT.....199.99f	FN31 600/4.8 BATTERY.....41.99m
HM92 MICROPHONE.....89.99m	MC80 DESK MICROPHONE.....98.99c	1289 MULTICOM.....24.99m	KP1/10M PREAMP.....114.99m	C510A (SCRATCH ON DISPL 219.99f	FN42 BATTERY.....56.99m
HM92A MICROPHONE.....89.99m	MC90 MICROPHONE.....214.99m	1289M 3 1/2 IBM.....53.99mcf	KP1/2M PREAMP.....116.99m	STARTER	FP1030A POWER SUPPLY.....224.99m
HP4 HEADPHONES.....24.99m	PB34 5W BATTERY.....79.99mf	1289W MULTICOM/CABLE.....53.99mv	KP2/10M PREAMP.....159.99m	ATH15 FREQ COUNTER.....169.99m	FRB757 AMPLIFIER RELAY.....28.99c
HS51 HEADSET.....84.99m	PB39 BATTERY.....49.99m	1290D SOFTWARE.....19.99m	KP2/2M MAST P/AMP.....149.99v	TERK	FRG100B 1.8-30 MHZ RX.....557.99mfv
HS85 HEADSET.....79.99m	PG3E CIGARETTE CORD.....19.99m	1305 ADAPTOR.....9.99m	KP2/440 PREAMP.....159.99m	TV42 TV ANT.....69.99m	FTS 17A ENCODE/DECODE.....43.99c
IC-Q7A 2M/440 HT.....121.99c	PG3J CORD.....29.99m	1312 ADAPTER.....12.99m	MY4 YAE FT10/40/50 ADAPTE.8.99f	TIMEWAVE	FTS27 TONE BOARD.....39.99m
ICFSW55 SWL RCVR.....299.99m	PG5A DATA CABLE.....9.99m	1312B 12V/300 ADAPT.....10.99v	70CM AMPLIFIER.....219.99m	ANCA NOISE CANX.....179.99m	FT10A/1641B 2M HT.....134.99m
ICF45 UHF COMM HT/BC11.329.99f	PS40 POWER SUPPLY.....179.99mc	1432 2M/440 VERT ANT.....59.99m	MOTOROLA	DSP59PLUS NO MANUAL/N0219.99m	FT100 HF-70CM XCVR.....899.99v
IC222A 2M HT.....214.99mf	SC41 CASE.....21.99v	1738 2M GLASS MOUNT ANT.24.99m	50994 FRS HT.....59.99m	TRIPP LITE	FT1000D DLX HF XCVR.....3,799.99f
	SC45 CASE FOR TH-G71A.....13.99v	201 DIP METER.....99.99m	OREGON SCIENTIFIC	ISOBARS ULTRA.....71.99v	FT1000MP HF XCVR.....2,199.99f
			WR3300 WEATHER MONITOR.34.99mv	PV140 INVERTER.....39.99m	FT2600M 2M XCVR.....199.99mfv
			WR8800 WEATHER RADIO.....39.99mf	UNIDEN	FT3000M 2M XCVR.....359.99m
			OUTBACKER	BCT12 BEARTRACKER.....139.99mcv	FT33R 5W 220MHZ FM HT.....224.99m
			OBSB SPRING BASE.....89.99c	BCT2 BEAR TRACKER.....79.99m	FT40/41BA16D 440 HT.....179.99f
			OB8P 6'/8BAND.....269.99c	BC147XLT SCANNER.....80.99c	FT41R 440 HT 3.5 WATTS.....116.99m
			PACCOM	BC178XLT SCANNER.....124.99mc	FT411MKII 2M HT.....161.99c
			PICOPACKET 128K.....189.99m	BC220XLT SCANNER.....179.99c	FT57GXII HF XCVR.....539.99m
			PIC0128K TNC.....134.99m	BC235XLT SCANNER.....159.99m	FT7100R 2M/440 XCVR.....394.99m
			PALOMAR	BC248CLT SCANNER.....98.99c	MH19A2B EARP/MIC.....26.99m
			LA1/HF1 COMBO.....189.99m	BC3000XLT 400CH.....359.99m	MH37A4B SPKR/MIC.....27.99m
			PT340 TUNER-TUNER.....89.99v	BC860XLT SCANNER.....159.99m	MMB62 MOUNT.....35.99c
			RX100 NOISE BRIDGE.....49.99m	BC895XLT 300CH SCANNER.197.99m	NC55B WALL CHGR.....11.99v
			PATCOMM	GRANT LT AM/SSB.....152.99c	NC60B CHGR.....12.99v
			PC16000 HF XCVR.....899.99f	GRANTXL CB XCVR.....143.99f	VR500 1M-36 AM/FM/SSB HT269.99mv
			PERIPHEX	H35 CB HT.....44.99m	VR500/CSC72 RCVR.....287.99c
			PB34 BATTERY.....49.99f	HH36T CB HT.....49.99m	VXA10016/41B AIRCRAFT HT449.99f
			PREMIER	HH940 MARINE HT.....99.99m	VXAS000V/TA 2M RPT/PS 1,259.99f
			CNB152H BATTERY.....29.99m	PC66XL CB XCVR.....69.99c	VXF1 FRS HT.....49.99mv
				PC68LTW CB XCVR.....89.99c	VX1R 2M/440 HT.....149.99m
					YF12C CW FILTER.....107.99fv



A portion of the Demo/Return inventory in Milwaukee

Current Manufacturer Coupons are applicable to demo radios. Demo prices subject to change.

Please use these lists as a guide only...

Used Equipment/Demos & Returns are compiled from an actual inventory as of 9/12/2000. However, due to turn over from daily selling and trading, the actual items listed may or not be available.

Each of our stores are linked via computer which allows real time access to our ever changing inventory. For your needs, you may call any of our locations to check for availability or to discuss an alternative with one of our salespersons.

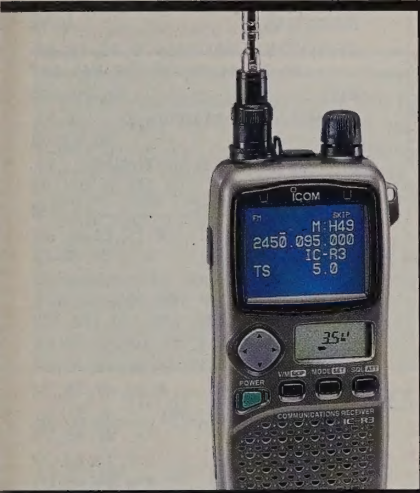
Used Equipment/Demos & Returns are also available on our web site and are updated every two to three days. (www.aesham.com)



CONSUMER & AUDIO/VISUAL PRODUCTS



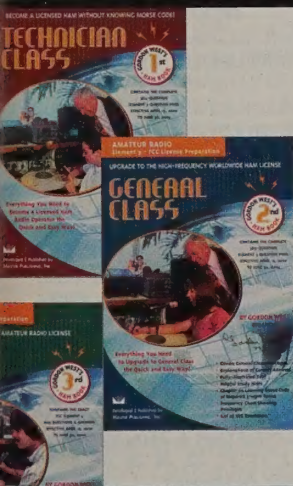
Garmin eTrex Summit™	33	Garmin MapSource Metroguide	94
Magellan MAP330 GPS	33	Geochron World Watch Software	95
Uniden WX-100 Weather Radio	37	Geochron Mechanical World Map	96
Uniden BC-780XLT Scanning Radio	38	Bushnell Night Vision Scope	97
Uniden HH-985 Marine VHF Handheld	39	Meade - Telescopes	99
Yaesu Aviator Pro II	39	MFJ 113 12/24 Hour Desk Clock	150



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Alinco DJ-X2T Shortwave Handheld	45, 150	Yaesu VR-5000 Scanning Receiver	150
Alinco DR-135T/TP Mobile/Base	47, 66		

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MFJ 854 RF Current Meter	88	ARRL General/Extra Class Manuals	92, 93
Coaxial Dynamics - Meters	88	Stealth Amateur Radio	93
Vanco Multi-Meter, Capacity Checker	89	The New Pools!	93
ARRL 2001 Radio Amateur Handbook	92	W5YI Tech, General & Extra Manuals	93
ARRL Operating Manual	92	Passport to Worldband Radio	95
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ARRL Antenna Compendium 6	95	Diamond CP6A HF Multiband Vertical	120
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EDS-4	Rem mt acc kit w/5' cable, 2 covers	31.99
EDS-5	15' microphone extension cable	28.99
EDS-6	15' remote cable	60.99
EDX-1	Manual coax feed antenna tuner	269.99
EDX-2	160-10m 200w auto wire ant tuner	319.99
EMS-14	Desk top microphone	114.99
DX-77T	160-10m HF Xcvr	*699.99
*Price w/instant coupon; coupon expires 10/31/00		
DM-330MVT	30A switching ps/meter/32A surge	189.99
DM-340MVT	30A ps w/meters/35A surge	179.99
EDS-5	15' microphone extension cable	28.99
EDX-1	Manual coax feed antenna tuner	269.99
EDX-2	160-10m 200w auto wire ant tuner	319.99
EMS-14	Desk top microphone	114.99
ERW-4	PC cable	28.99
CONSUMER ELECTRONICS		
DJ-S46	Family radio svc handheld/batt/cgr	*99.99
*Price w/instant coupon; coupon expires 11/30/00		
EBC-6	Mobile bracket	15.99
EDC-78	Wall charger (not for alkalines)	7.99
EDH-18	12v to 5.5v DC/DC conv/cig plug	32.99
EME-6	Earphone	10.99
EME-13	Headset w/ear bud/mic/VOX	71.99
EME-15	Earphone/mic w/VOX	56.99
EME-16	Tie-pin mic & earphone	17.99
EMS-47	Spkr/mic w/volume control	24.99
EMS-51	Speaker/mic	D 41.99
ESC-27	Soft case	16.99
ALPHA DELTA (ALP)		
R-T/N	200w 1 GHz type N protector	D \$ 19.99
Extra arc-plug cartridge; R-T/N		
Extra arc-plug cartridge for LT or LT/N		
RT/2G	200w 500 MHz lightning protector	D 39.99
Extra arc-plug cartridge for RT/2G		
RT-N/2G	200w 1 GHz type N protector	D 29.99
Extra arc-plug cartridge for RT-N/2G		
HV-N/2G	2kw 1 GHz type N protector	D 39.99
Extra arc-plug cartridge for HV-N/2G		
ATT-3G50	200w 3GHz type N surge protector	59.99
ATT-3G50-HP	2kw 3GHz type N surge protector	59.99
ATT-3G50U	200w 500MHz surge protector	49.99



Alpha Delta - continued AES Price

ATT-3G50U-HP 2kw 500MHz surge protector ..	49.99
ATT Extra 200w arc-plug cartridge	10.99
ATT-HP Extra 2kw arc-plug cartridge	10.99
Delta-2 500 MHz 2-pos coax switch/protector ..	49.99
Delta-2/N 1.3 GHz 2-pos type N switch/protector ..	64.99
Delta-4 500 MHz 4-pos coax switch/protector ..	79.99
Delta-4/N 1.3 GHz 4-pos type N switch/protector ..	89.99
D-4 Extra arc-plug; Delta-2/2N/4/4N	9.99
Delta-4C 4-pos coax switch/protector console ..	139.99
Delta-4CN 4-pos N coax switch/protector console ..	149.99
Delta-C Kit w/ctr ins/2 end ins/static protect ..	29.99
SEP Extra arc-plug cart; DX-Ultra/Delta-C ..	15.99
Delta-CIN Antenna end insulator	1.99
DH-1 Hydraulically dampened 41" fold mast/base ..	249.99
DH-2 Hydraulically dampened 41" fold mast/no base ..	229.99
DX-80 80m 134' complete dipole antenna	49.99
DX-40 40m 67' complete dipole antenna	39.99
DX-20 20m 34' complete dipole antenna	39.99
DX-A 160-80-40m twin sloper antenna	59.99
DX-B 160-80-40-30m 60' sloper ant	69.99
DX-CC 80-10m 5-band 82' no trap, no tuner dipole ..	119.99
DX-DD 80-40m 82' Delta Dipole antenna	89.99
DX-EE 40-10m 4-band 40' no trap, no tuner dipole ..	99.99
DX-LB 160-80-40m 100' shortened dipole ...	119.99
DX-LB Plus 160/80/40/20/15/10m 100' short dip ..	149.99
DX-SD 80/20m 38' short dipole	59.99
DX-SWL AM broadcast-13m 60' SWL sloper ant ..	79.99
DX-SWL-S 90-13m 40' SWL sloper	39.99
DX-Ultra AM broadcast-30MHz 80' SWL dipole ..	119.99
Outpost Base tripod mtg sys for mobile ant ..	199.99
SK-1 Straight Kent key	129.99
SP-1 Single paddle Kent key	139.99
TK-1 Titanic replica straight Kent key	149.99
TP-1 Twin paddle iambic Kent key	149.99
VRC Variable response speaker console	249.99
VRC-2 Ducted port bass reflex speaker	99.99
Basic Technology Amateur Radio video & book ..	39.99

Also see OUTBACKER

AMECO PUBLICATIONS (AME)

4-01 Code Course Instruction Booklet	\$ 2.99
6-01 Mastering the Morse Code	3.99

CODE COURSES - CASSETTE TAPES

100-T Junior code tape, 0-7 1/2 wpm	\$ 5.95
107-PC-2 IBM Morse Code Course, version 2.0 ..	29.95

CODE PRACTICE OSCILLATORS & CODE KEYS

K-1 Bakelite type key	\$ 10.95
K-4 Brass type key	16.95
OCM-2K Code oscillator & CW monitor kit	19.99
OCM-2W Wired oscillator & CW monitor	24.99

PREAMPLIFIERS

TPA Tunable preamp & indoor active ant	\$ 76.99
P-9T Power supply for TPA	9.99
PT-3 2-54 MHz transceiver preamp	124.99
P-12T Power supply for PT-3	9.99

FILTERS

HP-75T 75 ohm high-pass filter	\$ 12.99
HP-300T 300 ohm high-pass filter	12.99

AMERITRON (AMR)

AL-80B 1kw PEP out linear (3-500Z)	1199.99
AL-82 1.5kw PEP out linear (2 3-500Zs)	2069.99
AL-572 1.3kw PEP out linear (4 572Bs)	1299.99
AL-800 1250w PEP out linear (3CX800A7)	1569.99
AL-800H 1.5kw PEP out amp (2 3CX800A7) ..	2299.99
AL-811 600w PEP out linear (3 811As)	599.99
AL-811H 800w PEP out linear (4 811As)	749.99
AL-1200 1.5kw PEP out linear (3CX-1200A7) ..	2169.99
AL-1500 1.5kw PEP out linear (8877)	2569.99
ALS-500M 600w PEP out solid state mob amp ..	699.99
ALS-600 700w PEP out solid state amp w/ps ..	1129.99
ARB-702I Amplifier Xcvt interface; lcom	39.99
ARB-702I2 Amp Xcvt interface; lco 706&MkII/G ..	39.99

Ameritron - continued

AES Price

ARB-702K Amplifier Xcvt interface; Kenwood ..	39.99
ARB-702Y Amplifier Xcvt interface; Yaesu	39.99
ATP-100 Amplifier tuning pulser	49.99
ATP-102 Deluxe amplifier tuning pulser	59.99
ATR-20 1.2kw PEP antenna tuner	419.99
ATR-30 3kw PEP antenna tuner	549.99
ADL-1500 1.5kw dummy load with oil	69.99
ADL-2500 2.5kw dummy load with fan	189.99
ICP-120 120v inrush protector	79.99
ICP-240 240v inrush protector	79.99
AWM-30 3kw PEP SWR/wattmeter/rem sens ..	139.99
QSK-5 Stand alone T/R switch	329.99
QSK-5PC PC board kit; T/R switch	229.99
CF-5 Cooling fan for QSK-5	39.99
RCS-4 4-pos wireless remote coax switch	129.99
RCS-8V 160-2m 5-pos remote coax switch ...	139.99
RCS-8VN 160-2m 5-pos N rem coax switch ..	149.99

Note: RCS-8V/VN require 8-wire control cable.

AMIDON (AMI)

1:1-HB50 W2FMI 1:1 dipole/beam balun...Δ	\$ 34.99
1.5:1-HB75 W2FMI 1.5:1 dipole balun.....Δ	49.99
4:1-HB50 W2FMI 4:1 direct connect beam balun Δ	34.99
4:1-HB/U200 W2FMI 4:1 off center fed balun Δ	49.99
12:1-HB600 W2FMI 12:1 rhombic/V-beam balun Δ	139.99
1.5:1-HU75 W2FMI 75:50 ohm unun	39.99
1.56:1-HDU50 W2FMI 50:32&18 ohm unun Δ	34.99
1.78:1-HDU50 W2FMI 50:28&12.5 ohm unun Δ	34.99
1.78:1-HMMU50 W2FMI multimatch unun ..Δ	49.99
2:1-HDU50 W2FMI 50:22&25 ohm unun	34.99
2:1-HDU100 W2FMI 100&112.5:50 ohm unun Δ	34.99
4:1-HCU50 W2FMI 50:12.5 ohm unun	34.99
9:1-HU50 W2FMI 50:5.56 ohm unun	34.99
RFI-KIT-5 Ferrite/toroid RFI kit	24.99

Antenna Specialists (ASP)

AP-143 2m on glass cellular look-alike ant	\$ 69.99
APR151.3 2m 3db on glass antenna	69.99
KAV-382 On glass replacement mtg kit	12.99
MONR31 L/H/U gain gnd plane monitor ant Δ	49.99
MONR33 L/H/U roof mt low prof monitor ant Δ	29.99
MONR51 L/H/U mag mt monitor antenna ..Δ	39.99
MON-52 L/H/U/800MHz tnl lip monitor ant Δ	39.99
MON-63 Coupler for scanner on car ant Δ	14.99

Antennas America (ANA)

HVA-146/CVA-146 75w 2m disguised decal ant ..	\$ 69.99
HVA-460/CVA-460 75w 440 disguised decal ant ..	69.99

Antenna Supermarket (ANT)

Eavesdropper* 60-11m trap dipole SWL ant ..	\$ 79.99
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*Specify SO-239 or twin-lead

ANTENNA WORLD (ANW)

COM136-4500NP VHF/UHF port dipole/BNC ..	\$ 19.99
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ARROW Antenna (ARA)

146/437-10 3 el 2m/7 el 440 handheld beam ..	\$ 73.99
146/437-10BP 3el 2m/7el 440 HH split beam ..	79.99
10w duplexer (installs in boom)	59.99

ARTSCI (ART)

Amateur Handbook (Hambook)	\$ 14.95
Simpleton's Handy Reference book	1.49
Lost Users Manuals	19.95
US Repeater Y2K Mapbook 99/2000 edition ..	9.99

ASTATIC (AST)

10DA-L Dynamic mic head (no stand or cable) ..	\$ 69.99
D-104-L Crystal mic head (no stand or cable) ..	42.99
T-U69 Amplified desk stand	52.99
Night Eagle Brass/black crystal desk mic	119.99
T-U69-D104 Amp mic, 6-wire w/stand	94.99
T-UP9-D104-SE Silver Eagle 6-wire amp	119.99
MC-320 Crystal mic cartridge for D-104	19.99

AES Price

ASTRON (ASR)

RS-4L 3A ps, 4A surge, w/cig lighter socket ..	\$ 49.99
RS-7A 5A power supply, 7A surge	59.99
RS-10A 7.5A power supply, 10A surge	69.99
RS-12A 9A power supply, 12A surge	79.99
RS-12S 9A ps, 12A surge, w/speaker	89.99
RS-20A 16A power supply, 20A surge	99.99
RS-35A 25A power supply, 35A surge	149.99
RS-35A/220V 220v 25A ps, 35A surge	169.99
RS-50A 37A power supply, 50A surge	219.99
RS-70A 57A power supply, 70A surge	259.99
RS-20M 16A ps w/meters, 20A surge	119.99
RS-35M 25A ps w/meters, 35A surge	169.99
RS-50M 37A ps w/meters, 50A surge	239.99
RS-70M 57A ps w/meters, 70A surge	289.99
VS-20ML Variable 16A ps/meters, 20A surge ..	139.99
VS-35M Variable 25A ps/meters, 35A surge ..	189.99
VS-50M Variable 37A ps/meters, 50A surge ..	259.99
RM-35M 25A rack mt ps/meters, 35A surge ..	249.99
RM-50M 37A rack mt ps/meters, 50A surge ..	279.99
RM-60M 50A rack mt ps/meters, 55A surge ..	359.99
SS-25 20A switching ps, 25A surge	109.99
SS-25M 20A switching ps/meters, 25A surge ..	129.99
SS-30 25A switching ps, 30A surge	119.99
SS-30M 25A switching ps/meters, 30A surge ..	139.99
12/115 200w solid state 12vdc-115vac inverter ..	69.99
N2412-12 9A 22-32vdc to 13.8vdc converter ..	49.99
N2412-24 16A 22-32vdc to 13.8vdc converter ..	79.99

AZDEN (AZD)

LC-16 Soft case for HT	\$ 6.99
PTT-01 Switch; boom mic/headphones	19.99

B & K (B&K)

541 Component comparator	\$ 199.99
830 Autoranging capacitance meter	169.99
1646 0-16V, 0-10A power supply	249.99
2831A Digital bench multimeter	169.99

BMI (BMI)

972A 12" 12-hour wall clock	\$ 28.99
972AD 14" 12/24-hour wall clock	32.99
973A 12" 24-hour wall clock	49.99
Nitelogger II Auto recorder activator	69.99
RC-1A Impedance matching patch cord	19.99

B & W (B&W)

AP-10 51" portable 40/20/15/10/6/2m ant D ..	\$ 89.99
AP-10A 51" portable 40/20/15/10/6/2m ant ..	89.99
AT-55 40/20/15/10m 55' trap antenna	87.99
AT-110 80/40/20/15/10m 110' trap antenna ..	99.99
AS-160 160/80/40/20m 137' trap dipole	154.99
AS-80 80/40/20m 78' trap dipole	119.99
AS-40 40/20/15/10m 40' trap dipole	154.99
AS-20 20/15/10m 20' trap dipole	119.99
AC-1.8-30 Continuous 1.8-30 MHz antenna ..	209.99
ACS-1.8-30 Continuous 1.8-30MHz stainless ant	299.99
AC-5-30 Continuous 5-30 MHz 65' antenna ..	199.99
ACS-5-30 Continuous 5-30 MHz stainless ant ..	289.99
ASW-90 500 KHz - 30 MHz 90' receive only ant	149.99
AXS-160 160/30m 96' trap dipole	99.99
AXS-80 80/40/15m 65' trap dipole	119.99
BWD-1.8-30 1.8-30 MHz 90' folded dipole ...	199.99
BWDS-1.8-30 1.8-30 stainless 90' folded dip	289.99

BELDEN (BEL)

52 OHM COAXIAL CABLE

8216 RG-174 (sub-miniature)	per ft. \$.30
8216	100 ft. Roll 28.99
8216	500 ft. Roll 104.99
8216	1000 ft. Roll 199.99
9201 RG-58 (solid center)	per ft. .24
9201	100 ft. cut 22.99



Belden - continued AES Price

9201	500 ft. Roll	94.99
9201	1000 ft. Roll	169.99
8240	RG-58U (solid center)	per ft. .30
8240	100 ft. Roll	28.99
8240	500 ft. Roll	104.99
8240	1000 ft. Roll	199.99
8259	RG-58AU (stranded center)	per ft. .33
8259	100 ft. Roll	30.99
8259	500 ft. Roll	104.99
8259	1000 ft. Roll	199.99
8219	RG-58AU (stranded, foam)	per ft. .34
8219	100 ft. Roll	31.99
8219	500 ft. Roll	104.99
8219	1000 ft. Roll	199.99
8262	RG-58CU (non-contaminating)	per ft. .41
8262	100 ft. cut	37.99
8262	500 ft. Roll	139.99
8262	1000 ft. Roll	259.99
9258	RG-8X (stranded, foam)	per ft. .39
9258	100 ft. cut	34.99
9258	500 ft. Roll	129.99
9258	1000 ft. Roll	239.99
8237	RG-8U	per ft. .64
8237	100 ft. Roll	59.99
8237	500 ft. Roll	249.99
8214	RG-8U (foam)	per ft. .59
8214	100 ft. Roll	54.99
8214	500 ft. Roll	259.99
8214	1000 ft. Roll	489.99
9913	RG-8U (low loss)	100 ft. Roll 59.99
9913	250 ft. Roll	129.99
9913	500 ft. Roll	239.99
9913F7	RG-8U (low loss, flexible)	per ft. .87
9913F7	100 ft. Roll	79.99
9913F7	250 ft. Roll	159.99
9913F7	500 ft. Roll	299.99
9251	RG-8A (non-contaminating)	per ft. .99
9251	100 ft. Roll	94.99
9251	500 ft. Roll	359.99
8267	RG-213 (non-contaminating)	per ft. .87
8267	100 ft. cut	79.99
8267	500 ft. Roll	349.99
8242	RG-9U (double shielded)	per ft. 5.99
8242	100 ft. Roll	379.99
75 OHM COAXIAL CABLE		
8241	RG-59U (75 ohm, solid center)	per ft. \$.33
8241	100 ft. Roll	29.99
8241	500 ft. Roll	94.99
8241	1000 ft. Roll	179.99
8238	RG-11 (75 ohm, stranded center)	per ft. .94
8238	100 ft. cut	89.99
8238	500 ft. Roll	329.99
8213	RG-11 (75 ohm, solid, foam)	per ft. .84
8213	100 ft. cut	74.99
8213	500 ft. Roll	279.99
ROTOR CABLE		
8484	4-wire; 4-20 gauge	per ft. \$.29
8484	100 ft. cut	25.99
8484	500 ft. Roll	94.99
8484	1000 ft. Roll	179.99
8448	8-wire; 2-18, 6-22 gauge	per ft. .34
8448	100 ft. cut	29.99
8448	500 ft. Roll	129.99
8448	1000 ft. Roll	249.99
9405	8-wire; 2-16, 6-18 gauge	per ft. .74
9405	100 ft. cut	69.99
9405	500 ft. Roll	319.99
9405	1000 ft. Roll	599.99
ANTENNA WIRE		
8000	No. 14 stranded ant wire	per ft. \$.24

Belden - continued AES Price

8000	100 ft. Roll	20.99
8000	1000 ft. Roll	179.99
No. 8 ALUMINUM GROUND WIRE		
8018	Multiples of 50 ft.	each \$ 14.99
8018	500 ft. Roll	99.99
Note: All above roll pricing is for rolls as shown only; all other lengths, even if more than roll length shown or a multiple of roll length shown, are sold at the per ft. price.		
FOAM COAX w/PL-259s ON BOTH ENDS		
9349	3' RG-58AU foam	\$ 16.99
9350	15' RG-58AU foam	18.99
9352	50' RG-58AU foam	28.99
9354	50' RG-8U foam	52.99
9355	75' RG-8U foam	74.99
9356	100' RG-8U foam	89.99
BELMERIT (BLM)		
DM-80	Credit card size multimeter w/case	\$ 34.99
DX-355	True RMS+20MHz freq multimeter	74.99
DX-405	10 func/39 range+20MHz freq multimeter	69.99
BENCHER (BEN)		
BY-1	Iambic keyer paddle w/black base	\$ 99.99
BY-2	Iambic keyer paddle w/chrome base	119.99
BY-3	Iambic keyer paddle, gold plated	279.99
BY-4	Iambic paddle/blk base/gold components	169.99
170-82	Merc paddle ..drop ship; mfrgr will engrave call	449.99
ST-1	Single lever keyer paddle, black base	99.99
ST-2	Sgl lever kyr paddle, chrome base	119.99
RJ-1	Dlx hand key w/navy knob/black base	95.99
RJ-2	Dlx hand key w/navy knob/chrome base	120.99
XW-1	Low voltage DC fuse panel	59.99
XW-20	Fuse kit	4.99
XW-39/XW-30	Crimp terminal kit	2.99
XW-40	Screw terminal kit	3.99
YA-1	1kw low pass filter	75.99
ZA-1A	3.5-30 MHz 1:1 balun	42.99
HWK	Hardware kit; ZA-1A for 2" boom	9.99
BIRD (BIR)		
43P	Peak reading directional mtr, SO-239s	△ \$369.99
4431	Wattmeter, variable RF tap, SO-239s	△ 429.99
Elements (Table 1) 500H		
.....△,each 89.99		
Elements (Table 1) 2500H, 5000H		
.....△,each 129.99		
Elements (Table 1) 25-1000 MHz		
.....△,each 69.99		
Low-power elements (Table 2)		
.....△,each 79.99		

TABLE 1 - Standard Elements						
Frequency Bands (MHz)						
Power Range	2-30	25-60	50-125	100-250	200-500	400-1000
5 watts	—	5A	5B	—	—	5E
10 watts	—	10A	10B	10C	10D	10E
25 watts	—	25A	25B	25C	25D	25E
50 watts	—	50A	50B	—	50D	50E
100 watts	—	—	100B	100C	100D	100E
250 watts	—	250A	250B	250C	250D	250E
500 watts	500H	500A	500B	500C	500D	500E
1000 watts	—	1000A	1000B	1000C	1000D	1000E
2500 watts	2500H	—	—	—	—	—
5000 watts	5000H	—	—	—	—	—

TABLE 2 - Low-Power Elements			
1 watt	Cat. No.	2.5 watts	Cat. No.
110-160 MHz	110-1	25-30 MHz	025-2
150-250 MHz	150-1	50-60 MHz	050-2
275-450 MHz	275-1	200-300 MHz	200-2
425-850 MHz	425-1	250-450 MHz	250-2
		800-1000 MHz	801-2

EC-1	Case for 12 elements	△	34.99
25-T-MN	25w dummy load w/type N male	△	89.99
50-T-MN	50w dummy load w/type N male	△	119.99
4273	1.5-35 MHz variable RF sig sampler*	△	139.99

Bird - continued AES Price

*2 QC connectors required - not included		
4273-100	HF sampler; for Bird equip install ..	129.99
4304A	25-1000 MHz 500w wattmeter	449.99
QUICK CHANGE CONNECTORS (QC)		
4240-062	Type N female	\$ 6.99
4240-125	BNC female	19.99
4240-160	TNC male	14.99
Bounty Hunter (BOU)		
Fast Tracker	Metal detector/2-tone target ID	\$ 89.99
Quick Draw II	Metal detector/full motion	199.99
Sharp Shooter II	Metal detector/LCD readout	249.99
Land Star	Metal detector/3-tone audio discrim ..	319.99
BUCKMASTER (BUC)		
HamCall	CD-ROM ham listings	\$ 50.99
BUSHNELL (BUS)		
12-1025	10x25 compact Legacy binoculars ..	\$119.99
13-0430	4x30 LiteVision compact binoculars ..	18.99
13-0721	7x21 compact Falcon binoculars	39.99
13-1226	12x25 camo FRP compact binocs ...	29.99
13-1250	12x50 wide angle Powerview binocs ..	59.99
13-2514	8x21 black compact binoculars	24.99
13-3410	7x35 Falcon binoculars	29.99
17-7351	7x35 wide angle armored binoculars ..	49.99
20-0600	Compact laser rangefinder 600	299.99
26-3652	3.6x52 night vision scope w/illuminator	199.99
78-0040	90mm refractor telescope	439.99
78-0103	1.25" erecting prism	69.99
78-0200	4.5" reflector telescope	349.99
78-6000	6" Dobsonian reflector telescope	299.99
78-8000	8" Dobsonian reflector telescope	399.99
78-9440	60mm refractor telescope	89.99
78-9470	60mm refractor telescope w/zoom ...	129.99
78-9675	4.5" reflector telescope	229.99
78-0101	1.25" 9mm Kellner eyepc; 0040/6000/8000	29.99
78-0102	1.25" 25mm Kellner eyepiece	29.99
78-0105	1.25" 2x Barlow lens; 0040/0200/6000/8000	39.99
78-0106	DC/batt clock drive; 0040/0200/9675	89.99
BUTTERNUT (BUT)		
Skyhawk 3X10	Triband 10 el, 24' beam w/bauln * ..	\$999.99
*This item is drop-shipped (shipped direct to you from the Butternut factory). On factory drop-shipments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Wood Dale, Illinois via UPS, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on this special order item.		
HF-6VX	80/40/30/20/15/10m 26' vert ant	329.99
HF-9VX	80/40/30/20/17/15/12/10/6m vert ...	389.99
A17-12	17 & 12m kit for HF-6VX	60.99
CPK	Counterpoise kit	129.99
MPS	Mounting post sleeve	12.99
RMK-II	Roof mounting kit w/radials	169.99
STR-II	Radial kit only	124.99
TBR-160S	160m resonator	129.99
HF-2V	80/40m 32' vertical	249.99
30-MRK	30m resonator for HF-2V	110.99
TBR-160S	160m resonator	129.99
HF-5B	2el 20/17/15/12/10m butterfly beam ..	399.99
P-5	1:1 balun	39.99
CES (CES)		
4700VP	Telephone interconnect	\$149.99
SDI-50	Dlx splx/dplx autopatch/rptr controller	469.99
CQ (CQX)		
ARC-2001	2001 Amateur Radio Calendar	\$ 10.95
RCC-2001	2001 Radio Classics Calendar	10.95
33 Simple Weekend Projects		15.99
Amateur Radio Almanac		19.99



CQ - continued AES Price

Building and Using Baluns and Ununs	19.99
Buyers Guide	15.99
Contest Video Getting Started in Contesting	19.99
DXing Video Getting Started in DXing	19.99
Ham Sat Video Getting Started Amateur Satellites	19.99
Ham Video Getting Started in Ham Radio	19.99
Law McCoy on Antennas	15.99
Packet Video Getting Started in Packet Radio	19.99
Quad Antenna Book	15.99
Shortwave Propagation Handbook	19.99
Vertical Antenna Handbook	9.99
VHF Video Getting Started in VHF	19.99
W6SAI HF Antenna Handbook	19.99

CSS (KAN)

Log Windows CSS Software	\$ 59.99
Pacterm 98 CSS Software; Kantronics TNCs	79.99

CABLE X-PERTS (CAB)

9913FX RG-8U (low loss, flexible) per ft.	\$.59
9913FX 500 ft. Roll	269.99

CASTLE RIDGE (CRO)

SOLID BASE COPPERWELD ANTENNA WIRE

AN-122 100 feet No. 12	\$ 24.99
AN-123 150 feet No. 12	34.99
AN-124 250 feet No. 12	49.99
AN-126 500 feet No. 12	89.99
AN-128 1000 feet No. 12	149.99
AN-142 100 feet No. 14	19.99
AN-143 150 feet No. 14	24.99
AN-144 250 feet No. 14	34.99
AN-146 500 feet No. 14	59.99
AN-148 1000 feet No. 14	104.99
AN-181 250 feet No. 18	14.99
AN-182 500 feet No. 18	24.99

CELESTRON (CEL)

11015 Celestar 8 telescope	1099.99
11011 Nexstar 8 telescope	1899.99
11031 Nexstar 5 telescope	1199.99
93593 Tripod for 11031/Nexstar 5	199.99
11051 G-5 w/motor drive telescope	749.99
21072 Firstscope 80 EQ-WA refractor telescope	299.99
31031 Firstscope 76 EQ reflector telescope ..	159.99
31034 Tabletop 76 reflector telescope	99.99
31052 Firstscope 114 Premium reflector telescope	349.99
31056 C150-HD reflector telescope	499.99

LENSES (not for 31034)

93213 1.25" 2x economy Barlow lens D	\$ 19.99
93340 1.25" 10mm ocular Plossl lens D	59.99
93342 1.25" 17mm ocular Plossl lens D	49.99
93344 1.25" 26mm ocular Plossl lens D	49.99
93507 1.25" 2x deluxe Barlow lens	59.99
51630 Star pointer finderscope	30.99
93590 Red Astro Lite flashlight	5.99
93700 CD-ROM "The Sky for Celestron"	19.99
93720-40 Planisphere & planet finder	9.99
93722 Sky Map	19.99
94119-A 1.25" moon filter	16.99

Sorry, no exports on Celestron products.

CENTAUR (CEN)

B11W10-50 1:1 3kw PEP balun for dipole	\$ 49.99
B11Y10-50 1:1 3kw PEP balun for yagi	49.99
B41Y10-50 4:1 3kw PEP balun for yagi	64.99
B41LW10-50 4:1 ladder line to coax balun ...	64.99

Channel Master (CHA)

9515 HD TV/small VHF/UHF beam rotor/3-wire	\$129.99
9521 Prog light duty ant rotor/IR rem cont/3-wire	99.99

CHEROKEE (CHR)

AH-50 5w 6m FM HT w/nicad battery D	\$ 99.99
BC-09 6 AA cell battery holder	9.99

Cherokee - continued AES Price

BC-12 8 AA cell battery holder	17.99
CC-27 Leatherette case	12.99
DA-27 12v slide-on adapt; BC-09/NP-126 ..	13.99
DW-12 Wall charger	6.99
EX-01 Speaker/mic	29.99
MA-27 Mobile-com cig/ext ant adapter	44.99
NP-126 12v nicad battery	59.99

CLOCKS

BMI 972A 12" 12-hour wall clock	\$ 28.99
BMI 972AD 14" 12/24-hour wall clock	32.99
BMI 973A 12" 24-hour wall clock	49.99
MFJ 105C 24-hour quartz wall clock	19.99
MFJ 107B 24-hour digital clock	9.99
MFJ 108B 24/12-hour dual disp digital clock	19.99
MFJ 112B Deluxe world map clock	24.99
MFJ 113 24/12-hr 1.8" LED clock/batt back-up	19.99
MFJ 114B Giant LED desk/wall 12/24-hr clock ..	59.99
MFJ 115 DX'er 24-hr analog world wall clock ..	24.99
MFJ 116DC 12-hour 12vdc LED clock	14.99
MFJ 118 Giant 24/12 hour LCD clock	24.99
MFJ 119 Giant 24/12 hr LCD/in temp clock ..D	34.99
MFJ 119B Giant 24/12 hour LCD/in temp clock ..	49.99
MFJ 120 Monster atomic clock/temperature/humidity	69.99
MFJ 123 Eternity solar atomic clock	79.99
MFJ 125 Calendar 24-hour analog wall clock ..	29.99
MFJ 126 Multi-color 12-hr quartz wall/24-hr trim ..	24.99
MFJ 128 12/24 hr analog atomic wall clock ..	59.99
MFJ 132AT 12-hour LCD see-thru clock	34.99
MFJ 134AT 24-hour LCD see-thru clock	34.99
MFJ 152 Thermo clock; in/out temp/12/24-hr ..D	24.99
MFJ 152B Thermo clock; in/out temp/12/24-hr ..	24.99
MFJ 181 24/12-hour world map wristwatch ..D	19.99
ORE BA-812E The weather clock	49.99
ORE RM-116E Exactset radio controlled clock ..	39.99

COAX SEAL (UNV)

104 1/2" x 60" coax seal	\$ 2.99
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Coaxial Dynamics (COA)

81000-A Wattmeter w/SO-239s	\$248.99
83000-A Peak reading wattmeter w/SO-239s ..	374.99
82004 50w 2-30MHz element	83.99
82005 100w 2-30MHz element	83.99
82006 250w 2-30MHz element	83.99
82007 500w 2-30MHz element	83.99
82008 1000w 2-30MHz element	83.99
82009 2500w 2-30MHz element	119.99
82010 5000w 2-30MHz element	119.99
82013 10w 25-60MHz element	68.99
82014 25w 25-60MHz element	68.99
82015 50w 25-60MHz element	68.99
82016 100w 25-60MHz element	68.99
82029 10w 100-250MHz element	68.99
82031 50w 100-250MHz element	68.99
82033 250w 100-250MHz element	68.99
82046 10w 400-1000MHz element	68.99
82048 50w 400-1000MHz element	68.99
82049 100w 400-1000MHz element	68.99
88000 N female quick match connector each ..	9.99
88800 Carrying case for meter	45.99

COBRA (COB)

10 SOS Kit AM Mobile CB w/mag mt ant D	\$ 39.99
10 Ultra AT AM Mobile CB/magnet mt ant ..D	39.99
25LTD ST Sound Tracker AM Mobile CB	79.99
HH-35 AM portable CB	44.99
HH-36 ST Sound Tracker handheld CB	49.99
HH-40 5w 40 ch CB walkie talkie	59.99
HH-70 AM remote CB	74.99
18WX ST Sound Tracker AM Mobile CB w/WX ..	69.99
19DX II AM Mobile CB	49.99
19LTD II AM Mobile CB	59.99
19 Ultra II AM Mobile CB	49.99
21LTD ST Sound Tracker AM Mobile CB	79.99

Cobra - continued AES Price

25LTD (25LTD Classic) AM Mobile CB	89.99
25NW ST Night Watch Sound Tracker AM Mobile CB ..	99.99
25WXNW ST Night Watch Sound Tracker AM Mob CBWX ..	109.99
29LTD (29LTD Classic) AM Mobile CB	99.99
29NW ST Night Watch Sound Tracker AM Mobile CB ..	119.99
29WXNW ST Night Watch Sound Tracker AM Mob CBWX ..	129.99
75WX ST Sound Tracker AM Mobile CB w/WX	99.99
HH-37 ST Sound Tracker handheld CB	59.99
HH-38WX ST Sound Tracker handheld CB w/WX ..	79.99
148NW ST Night Watch Sound Tracker SB/AM Mob CB ..	179.99
AT-60 Trunk lip/roof mt CB antenna	14.99
AT-70 Magnet mt CB antenna	24.99
CA-72 Amplified CB desk microphone	39.99
CA-77 Noise canx/amplified mobile mic	24.99
HGA-1000 Magnet mt CB antenna	24.99
CP-912 900MHz dig sp spec cordless ph D	59.99
FRS-200 Family radio service handheld D	49.99

COMET (CMT)

MOBILE ANTENNAS

B-10 2m/440 2.15db 12" cell look-alike ant ..	\$ 39.99
B-10NMO 2m/440 2.15db 12" cell look-alike NMO ..	39.99
B-20 2m/440 2.15/5db 30" cell look-alike ant ..	49.99
B-20NMO 2m/440 2.15db/5db 30" cell look NMO ..	49.99
CA-2X4SR 2m/440 3.8/6.2db 40" mob ant	64.99
CA-HV 40/15/10/6/2m 5' 10" mobile ant	129.99
CA-UHV 40/15/10/6/2m/440 mobile ant	139.99
L-14 20m loading coil for CA-HV/UHV	29.99
L-18 17m loading coil for CA-HV/UHV	29.99
L-14HS 20m loading coil for HA-4S	29.99
L-18HS 17m loading coil for HA-4S	29.99
HA-035 80m 45" mobile antenna	82.99
HA-050 6m 33" 1/4 wave mobile antenna	72.99
HP-32 2m/440 3/5.5db 34" 350/250w ant ...	89.99
M-24B 2m/440 1.7/4.1db mag mt ant w/BNC ..	39.99
M-24M 2m/440 1.7/4.1db mag ant w/PL259 ..	39.99
QE-14 20m 49" mobile antenna	79.99
QE-21 15m 49" mobile antenna	79.99
QE-28 10m 46" mobile antenna	79.99
OP-07 40m optional element for QE ant	39.99
OP-14 20m optional element for QE ant	39.99
OP-21 15m optional element for QE ant ..D	29.99
OP-28 10m optional element for QE ant	39.99
R-2000 900MHz 5.1db 19" type N mob ant ..	42.99
SBB-1 2m/440 1.5/2.15db 16" flex mobile ...	39.99
SBB-1NMO 2m/440 1.5/2.15db 16" flex NMO ..	39.99
SBB-2 2m/440 2.15/3.8db 18" black mobile ..	39.99
SBB-2NMO 2m/440 2.15/3.8db 18" blk NMO ..	39.99
SBB-5 2m/440 3/5.5db 38" black mobile ant ..	54.99
SBB-5NMO 2m/440 3/5.5db 38" black NMO ..	54.99
SBB-7 2m/440 4.5/7.2db 4' 7" black mob ant ..	74.99
SBB-7NMO 2m/440 4.5/7.2db 4' 7" blk NMO ..	74.99
SB-14 6m/2m/440 43" chrome mobile ant ...	64.99
SB-15 6m/2m/440 2.15/4.5/7.2db 5' chr mob ..	79.99
SBB-25 2m 4.1db black mobile antenna	44.99
SBB-25NMO 2m 4.1db black NMO mob ant ..	44.99
SB-94 2m/440/1.2 chr 2.15/5.1/7.2db 24" N ..	69.99
SB-97 2m/440/1.2 3/6.8/9.6db 39" type N ...	79.99
SB-123 1.2GHz 7.2db 24" type N mobile ant ..	54.99
SBB-224 2m/220/440 2.15/3.2/5.5 blk mob ..	74.99
SBB-224NMO 2m/220/440 2.15/3.2/5.5 blk NMO ..	74.99
SF-245 2.4 GHz 7db 18" fg type N ant	61.99
Z-750 2m/440 2.1/5.5db 39" theft resistant ..	62.99
Z-780 2m/440 4.5/7.2db 5' theft resistant ...	82.99

MOBILE MOUNTS

304M Mobile mt, 13' coax w/UHF connectors ..	\$ 24.99
304N Mobile mt, 13' coax w/type N	28.99
305M Mobile mt, 16.5' coax w/UHF connectors ..	27.99
504N Roof mount, 13' coax w/type N	31.99
AD-10N NMO mount to female N adapter	17.99
AD-15M NMO mount to SO-239 adapter	17.99
AD-25M SO-239 to NMO mount adapter	17.99
CG-4M RS-2 gutter mount w/13.5' coax	19.99



Comet - continued**AES Price**

CK-3M	Dlx 2-step 10' cable w/UHF connectors	33.99
CK-3M5	Dlx 2-step 16.5' cable w/UHF connects	39.99
CK-5M	Dlx cable assembly w/type N	47.99
CM-5M	Hvy duty mag mt, coax, max 4' ant	24.99
CQ-5M	Dlx black QD trunk lip mt w/17' coax	66.99
CQ-5N	Dlx black QD tnk lip mt/17' coax/N	69.99
CR-5M	Std coax assy, 16.5' coax, UHF conn	19.99
CT-5M	Trunk lip mount w/16.5' coax	39.99
EM-880	Small trunk/hatch/van door lip mt	25.99
FVS-50	Dlx 2-step 16' 9" cable w/UHF connects	39.99
GR-5M	Dlx tnk lip mt w/ coax; matches SB	67.99
GR-5N	Dlx N tnk lip mt w/ coax; matches SB	69.99
RS-2	Small gutter mount	19.99
RS-9	Trunk lip mount, no coax	11.99
RS-50	Mini heavy duty trunk/hatch mount	28.99
RS-560C	Luggage rack mount, no coax	35.99
RS-720	Hatch/rear door/tnk multi-adj mt	28.99
RS-720NMO	Hch/rear door/tnk multi-adj NMO mt	28.99
RS-730	HD rear van/SUV door/tnk lip mt, no coax	29.99
WS-1M	Window clip mt w/UHF connectors	66.99

BASE STATION ANTENNAS

CA-712EF	440 9db 10' 5" base antenna	\$109.99
CA-ABC22A	2m 6.5db 9' 5" base/rptr ant	69.99
CA-ABC23	2m 7.8 db 13' 4" base/rptr ant	99.99
CA-F72GF	440-470 6db 3' 6" tunable ant	109.99
CA-Super22	220 6.6db 5' 11" base ant	119.99
CA-52HB4	6m 4 el 10.4db beam	119.99
CX-333	2m/220/440 6.5/7.8/9db 10.25' ant	179.99
CYA-240	2m/440 9.5/11.6 3/5el 5.25' bm yagi	99.99
240-KT	Stacking harness kit for CYA-240	69.99
CYA-1216E	1.2GHz 16el 16.6db 4' 5" bm N beam	139.99
CYA-2412	2.4GHz 12el 15.5db 2' 6" bm N beam	179.99
DS-15	6m/2m/440/900/1.2 discone antenna	99.99
GH-50	6m 2.15db 7' 10" fg base antenna	99.99
GP-3	2m/440 4.5/7.2db 5' 11" base/rptr ant	99.99
GP-6	2m/440 6.5/9db 10' 2" base/rptr ant	149.99
GP-9	2m/440 8.5/11.9db 17' 8" base/rptr	179.99
GP-9N	2m/440 8.5/11.9db 17' 8" N base/rptr	179.99
GP-15	6/2m/440 3/6.2/8.6db 7' 11" base	154.99
GP-21/CA-1221S	1.2 14.8db 8" N base/rptr	149.99
GP-24	2.4GHz 12.4db 5' 11" N base/rptr	199.99
GP-24S	2.4GHz 9.9db 3' 7" N base/rptr	139.99
GP-93	2m/440/1.2 4.5/7.2/10db 5' 7" type N	129.99
GP-98	2m/440/1.2 6.5/9/13.5db 9' 8" N ant	189.99
KP-20	900 MHz 9.2db 7' 4" type N base/rptr	112.99
PYA-913	900MHz 13el 15.8db 4' 8" type N beam	159.99
X-2427	2.4GHz 27el 21db 5' boom N beam	169.99

DUPLEXERS AND TRIPLEXERS

CF-142	1.3-150/200-480 600/400w UHF/leads	\$ 69.99
CF-360A	1.3-30/50-470 600w UHF w/leads	69.99
CF-360B	1.3-30/50-470 600w UHF/common lead	69.99
CF-413A	440/1.2 500/200w N w/leads	39.99
CF-413B	440/1.2 500/200w N/UHF/N leads D	49.99
CF-416A	2m/440 800/500w UHF w/leads	46.99
CF-416C	2m/440 800/500w N/UHF/N leads	49.99
CF-416W	1.3-250/400-1400 400/200w N/leads	69.99
CF-530	1.3-90/125-470 600w UHF w/leads	69.99
CF-706A	1.3-56/75-470 350w UHF w/leads	69.99
CF-4130A	440/1.2 500/200w N, no leads	39.99
CF-4160I	2m/440 800/500w UHF/UHF/N, no leads	45.99
CF-4160J	2m/440 800/500w SO239, no leads	53.99
CF-4160K	2m/440 800/500w all UHF, no leads	45.99
CFX-324A	2m/220/440 600w UHF w/leads	88.99
CFX-324B	2m/220/440 600w UHF, no leads	85.99
CFX-431B	2m/440/900-1.2 N/UHF/UHF/N, leads D	49.99
CFX-514	HF/2m/440 800/800/500w UHF w/leads	79.99
CFX-514J	HF/2m/440 800/800/500w UHF, no leads	74.99
CFX-514N	HF/2m/440 800/800/500w UHF/N w/leads	79.99
CFX-4310B	2m/440/900-1.2 N/UHF/UHF/N, leads D	49.99
CFX-4310C	2m/440/1.2; Kenwood TM-741A/941A	79.99
CFX-5140	HF/6m/2m/440 800/800/500w UHF, no leads	74.99

HT AND HAND-HELD SCANNER ANTENNAS

BNC-24	2m/440 17" 2.15/5.3db BNC whip	\$ 22.99
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Comet - continued**AES Price**

CH-32	2m/440 1.75" BNC Miracle Baby ant	29.99
CH-75	2m/440 0/3.2db 14.75" BNC ant	25.99
SH-55	2m/440 1.5/3.2db 15" BNC ant	33.99
SH-95	2m/440/1.2 1.5/2.15/5.5db BNC ant	34.99
SMA-3	2m/440 1.2/1.7db 9.75" SMA ant	39.99
SMA-24	2m/440 17" 2.15/5.3db SMA whip	22.99
SMA-501	2m/440/900 1.5" SMA antenna	29.99
SMA-503	2m/440 8.75" SMA antenna	29.99
SMA-703	2m/440/1.2GHz 6.5" SMA ant	31.99

SWR/POWER METERS & MINIMETERS

CM-120	1240-1300 MHz type N minimeter	\$ 99.99
CM-690	1.9-60 MHz 20/150w minimeter	59.99
CM-720	140-150/430-450 MHz minimeter	79.99
CM-720N	140-150/430-450 N minimeter	59.99
CM-903	900-920 MHz type N minimeter	99.99
CMX-2	1.8-200MHz 200w SWR/pwr/rem head D	119.99
EKS-3	100' rem head extension cbl; CMX	12.99

ACCESSORIES

CS-290P	1500MHz 150w N lightning protect D	\$ 14.99
CSP-30	Mini speaker w/magnet mt	14.99
CSW-20N	0-1300MHz N coax switch	39.99
HM-P2F	Mini spkr/mic; Ali/Ico/Sta/Yae	9.99
HM-P2K	Mini spkr/mic for Kenwood	9.99
HM-P4F	Mini "HT" spkr/mic; Ali/Ico/Sta/etc	9.99
HM-P4K	Mini "HT" spkr/mic for Kenwood	9.99

COMM SPEC (COM)

SS-64	64-tone mini prog CTCSS encoder	\$ 28.99
TE-32	32-tone CTCSS prog encoder box	49.99
TE-64	64-tone CTCSS/burst switch enc box	79.99
TS-64DS	64-tone CTCSS prog encoder/decoder	57.99
DTD-1	DTMF decoder	49.99
ID-8	Automatic morse station identifier	69.99

CONNECTORS**AMPHENOL COAX CONNECTORS (AMP)**

83-1SP-1050	Male coax plug (PL-259)	\$ 1.99
83-1SP	Silver plated coax plug (PL-259)	2.99
Van Gorden (VAN)	silver plated teflon PL-259	2.99
83-185	Reducer for RG-58 (UG-175)	.99
83-168	Reducer; RG-59/RG-8X (UG-176)	.99
83-1AB	Right angle adaptor (UG-646)	5.99
83-1J	Double female adaptor (PL-258)	3.99
83-1R	Female chassis mt socket (SO-239)	2.99
83-1H	Hood; in-line use w/83-1R (UG-106)	3.99
83-1T	T-conductor adaptor (M-358)	9.99
83-877	Double male adaptor	10.99
83-878	Single hole 3/8" chassis socket	2.99
31-002	BNC male connector for RG-58	3.99
31-012	BNC male connector; RG-59/RG-8X	5.99
31-221	BNC female chassis socket	2.99
82-24	Type N female chassis mt socket	5.99
82-61	Type N male connector for RG-8	7.99
82-64	Type N right angle adaptor	19.99
(VAN) N connector	Type N connector for 9913	4.99
82-202-1006	Type N male; 8214/9913/9913F	6.99
82-209	Type N female in-line for RG-8	6.99
34025	Type N male connector for RG-58	6.99

AMPHENOL COAX ADAPTORS (AMP)

2900	SO-239 to BNC male adaptor	\$ 9.99
4400	SO-239 to type N male adaptor	14.99
34125	Type N female - PL-259 adapt	20.99
31-28	BNC female to PL-259 adaptor	14.99
(HOU) SMA-872	SO-239 to SMA plug adaptor	5.99

AIM CONNECTORS, PLUGS & ADAPTORS (AIM)

19-1289	8-pin female mic plug	\$ 4.99
25-7351	Chassis mt SO-239 double female	3.99
25-7365	BNC female to SO-239	3.99
25-7420	BNC male to SO-239	2.99
26-8010	Type N double female	3.99
26-8011	Type N chassis mount	2.99
26-8015	N male to SO-239	4.99
26-8016	BNC female to N male	4.99

Connectors - continued**AES Price**

26-8017	BNC male to N female	4.99
26-8027	N male for RG-8X	4.99
27-8120	BNC female to PL-259	2.99
27-8130	BNC double male	3.99
27-8140	BNC T; 2 female, 1 male	2.99
27-8142	BNC T, 3 male	.69
27-8450	BNC chassis mt, 4 screw holes	2.99
27-8460	3/8" hole BNC chassis mt	1.99
27-8470	Dual BNC chassis mount	3.99
29-3855	BNC female to SMA male	3.99
29-4140	SO-239 to mini PL-259	2.99

CONNECTORS UNLIMITED (CON)

306	SO-239 to BNC male adaptor	\$.99
1721	7-pin DIN plug	.29

Switchcraft 1/4 " Plugs/Solder Terminals (SWI)

220	2-cond, plastic, screw terms, rt ang plug D	\$ 1.99
237	3-cond, plastic handle, rt angle plug	.49
250	2-conductor, plastic handle	.99
260	3-conductor w/screw terminals	2.99
267	3-conductor, plastic handle	1.49
280	2-conductor, metal handle	4.99
297	3-conductor, metal handle	6.99

SWITCHCRAFT PHONO-TYPE CONNECTORS (SWI)

3501MC	Phono plug with cable clamps	\$.29
3502	Shielded phono plug	2.99
3507	RF-type phono plug	1.69

VANCO MICROPHONE CONNECTORS (VCO)

CBC-2	2-pin female mic plug	\$ 1.69
CBC-3	3-pin female mic plug	1.69
CBC-4	4-pin female mic plug	4.99
CBC-4P	Panel mt 4-pin male	.99
CBC-5	5-pin female mic plug	1.69
CBC-5P	Panel mt 5-pin male	.99
CBC-6	6-pin female mic plug	4.99
CBC-6P	Panel mt 6-pin male	1.49
(AIM) 19-1289	8-pin female mic plug	4.99
CBC-8P	Panel mt 8-pin male	5.99

KENWOOD DIN PLUGS (KEN)

7-pin DIN plug	\$ 4.99
8-pin DIN plug	6.99
13-pin DIN plug	9.99

VANCO MINI PHONE & CIG PLUGS (VCO)

P-25	2.5mm sub-miniature phone plug	\$.39
P-35	3.5mm miniature phone plug	.99
(HOU) AP-135	3.5mm stereo mini phone plug	.99
P-12R	2-contact cigarette plug	1.99
P-12V	Cig lighter plug w/leads	1.99
P-212	2-outlet cigarette plug adapter	4.99
P-212B	Dual cigarette lighter socket adapter	8.99

Connect Systems (CSY)

CS-800	Full duplex patch & repeater controller	\$369.99
CS-900	Simplex interconnect	369.99
CD-2	DTMF/CTCSS/DCS dec unit/RS-232	169.99
CD-2P	PC application program for CD-2	69.99
LT-2P	PC application program for LT-2	9.99

COUGAR (CUG)

H-83	AM/FM/SW mini receiver	\$ 24.99
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COURIER (COU)

M-54	5w 4ch VHF hand-held/batt/cgr/151.625	\$199.99
DIC-V	3-hour quick charger for M-54	19.99
M-510	5w 10ch synth VHF FM hand-held	269.99
MU-510	5w 10ch synth UHF FM hand-held	229.99
CCK-510	Cloning cable; M-510/MU-510	18.99
CPK-510	Prog kit for M-510/MU-510	199.99

COYNE (COY)

MacHam General	\$ 4.99
MacHam Advanced	9.99
MacHam Radio Morse Code training soft	9.99



CROSS DEVICE (CRS) AES Price

STUF Coax connector waterproofing filler \$ 4.99

CUSHCRAFT (CUS)

At Cushcraft's request, amateur radio dealers are not authorized warranty depots for Cushcraft Antennas. All warranty issues should be directed to the Technical Support Department/Warranty at Cushcraft.

VHF/UHF FM BEAMS* (Vertical polarization)

A148-3S 2m, 3 el wideband beam..... \$ 52.99
A148-10S 2m, 10 el wideband beam 89.99
A148-20S 2 A148-10S vert stacked 179.99
A449-6S 440 MHz, 6 el, 3' boom, 10 db 50.99
A449-11S 440 MHz, 11 el, 4.5' boom, 13 db .. 69.99

*Antennas can be mounted vertically or horizontally!

2M/440 FM BEAMS* (Vertical polarization)

A270-6S 2m/440, 3/3 el, 2.8' boom, 7.8 db .. \$ 69.99
A270-10S 2m/440, 5/5 el, 6.17' boom, 10 db 89.99

*Antennas can be mounted vertically or horizontally!

TRI-BAND 6M/2M/440 BEAM

A6270-13S 6m/2m/440, 3/5/5el, 8.66'bm, 8/10/10db \$169.99

FM RINGOS - 1/2 Wave Verticals - 3.75 db

AR-10 10m FM Ringo, 1000w \$ 79.99
AR-6 6m FM, 1000w 69.99
AR-2 2m FM, 1000w 49.99
AR-450 440 MHz FM, 500w 36.99

RINGO RANGERS - FM Verticals - 6 db

ARX-2 2m FM Ringo Ranger \$ 59.99
ARX-2B 2m FM Ringo Ranger II, 1000w 69.99
ARX-220B 220 FM Ringo Ranger II, 500w 69.99
ARX-450B 440 FM Ringo Ranger II, 500w 69.99

DUAL-BAND 2M/440 FM VERTICALS

AR-270 2m/440 MHz FM, 250w, 3.7/5.5db ... \$ 84.99
AR-270B 2m/440 MHz FM base ant 109.99

TWIST; OSCAR BEAMS (Horiz/Vert Polarization)

A148-20T 2m 20el 10.8'bm 11.1db twist \$119.99
719B 432 19 el beam 129.99
729B 432 29 el beam 189.99

BOOMER ANTENNAS

617-6B 6m Boomer, 6 el, 34' boom, 14 db ... \$329.99
124WB 2m Boomer, 4 el, 4' boom, 10.2 db ... 74.99
13B2 2m Boomer, 13 el, 15' boom, 15.8 db .. 119.99
17B2 2m Boomer, 17 el, 31' boom, 18 db 199.99
26B2 2 13B2s vertically stacked 339.99
224WB 220 Boomer, 4 el, 3' boom, 10.2db ... 59.99
225WB 220 wideband Boom, 15el, 10'bm, 15.5db 129.99

BOOMER STACKING KITS*

617-SK Harness, pwr divider; 2 6176Bs D \$ 39.99
22-SK Harness, power divider; 2 13B2s 99.99
22N-SK Harness, pwr divider; 2 17B2s 149.99
26B2-VPK Vertical polar kit; 2 13B2s 159.99
PD-2 Power divider for 2 13B2s 55.99
PD-4 Power divider for 4 13B2s 64.99

*Prices are for stacking kits only

VHF/UHF BEAMS* (Horizontal polarization)

A50-3S 6m, 3 el, 6' boom, 8 db, stainless hwre \$ 99.99
A50-5S 6m, 5 el, 12' boom, 10 db, stainless hwre 149.99
A50-6S 6m, 6 el, 20' boom, 11db, stainless hwre 249.99
A148-10S 2m, 10 el wideband beam 89.99
A430-11S 430 MHz, 11 el, 4' boom, 13 db 69.99

*Antennas can be mounted vertically or horizontally!

MOBILE ANTENNAS

CS-28M 10m magnet mt antenna \$ 64.99
CS-50M 6m magnet mt 3 db antenna 64.99
CS-147M 2m magnet mt 3 db antenna 64.99
CS-147A 2m coil & whip only 46.99
CS-220 220 3/4" hole mt 3 db antenna D 19.99
CS-220M 220 magnet mt 3 db antenna 64.99
CS-220T 220 trunk lip mt 3 db ant D 19.99
CS-450 440 3/4" hole mt 5 db antenna D 24.99
CS-450M 440 magnet mt 5 db antenna 64.99
CS-450T 440 trunk lip mt 5 db ant D 29.99

Cushcraft - continued

CS-450A 440 coil & whip only D 14.99
DUAL-BAND 2M/440 MOBILE ANTENNAS
CS-270M 2m/440 3.7/6 db magnet mt ant .. \$ 84.99
CS-270A 2m/440 coil & whip only 59.99
MOUNTS ONLY FOR MOBILE ANTENNAS
CS-MG Magnetic mount \$ 30.99
CS-MGN Magnetic mount w/N connector 35.99
CS-TL Trunk lip mount 30.99

MULTIBAND VERTICAL ANTENNAS

R-6000 20/17/15/12/10/6m vertical \$269.99
R-80 80m kit for R-7000 only D 129.99
R-8 40/30/20/17/15/12/10/6m 28.5' vert 399.99

ROTATABLE DIPOLES

D-3 20/15/10m World Ranger dipole \$199.99
D-3W 30/17/12m rotatable dipole 199.99
D-4 40/20/15/10m World Ranger dipole 289.99
D-40 40m World Ranger dipole 249.99

BIG THUNDER TRI-BAND BEAMS

X-9 20/15/10m, 9 el, 28' boom, 13/14db 749.99
X-940 40m 1 element add-on kit for X-9 269.99
X-7 20/15/10m, 7 el, 18' boom, 12.5/13db ... 549.99
X-740 40m add-on kit for X-7 269.99

BIG THUNDER MONOBAND BEAMS

XM-240 40m, 2 el, 23' boom, 7 db \$549.99
XM-520 20m, 5 el, 35' boom, 9.3db 599.99
XM-515 15m, 5 el, 24' boom, 9.3db 369.99
XM-510 10m, 5 el, 19' boom, 9.3db 269.99
TEN-3 10m, 3 el, 8' boom, 8 db 169.99

MULTIBAND BEAM ANTENNAS

A-3S 20/15/10m, 3el, 14'bm, 8db, stainless hwdr \$369.99
A-743 40m or 10 MHz add-on kit; A-3/A-3S 139.99
A-4S 20/15/10m, 4el, 18'bm, 9db, stainless hwre 449.99
A-744 40m or 10 MHz add-on kit; A-4/A-4S 139.99
A-3WS 17 & 12m, 3 el, 14' boom, 8 db 299.99
A-103 30m add-on kit for A-3WS 139.99
ASL-2010 13.5-32MHz 8el 18' bm 6.4db LP .. 619.99
MA-5B 20/17/15/12/10m 7.3' boom mini beam 269.99

LIGHTNING ARRESTORS

LAC-4 200w SO-239 gas tube arrestor \$ 40.99
LAC-4H 2kw SO-239 gas tube arrestor 45.99
LAC-4N 200w type N gas tube arrestor 52.99
LAC-4NH 2kw type N gas tube arrestor 56.99
LC-2 Extra 200w cartridge for LAC-4/N 17.99
LC-2KW Extra 2kw cartridge for LAC-4H/4NH 20.99
5VB Vinyl connector boots pack of 5 15.99

CUTTING EDGE (CUT)

HMP WorldPack backpack; mini HF Xcvr \$ 57.99
HPP-7A 7AH gel-cell w/overnight charger .. 63.99
HP-7AF 7AH gel-cell w/2.5 hr fast charger 119.99
PPMDC Multi-tip/volt reg DC-DC adapt 22.99
PPSC-5 5.5w roll-up solar cell 129.99
PPSC-32 32w roll-up solar cell 394.99
PPSCA Solar cell cigarette adapter 10.99
PPVT Digital voltage tester D 9.99

DCI (DCI)

145-2H 2m 144-146MHz 200w bandpass filter \$ 89.99
146-4H 2m 144-148MHz 200w bandpass filter 89.99
223.5-3H 222-225MHz 200w bandpass filter 89.99
2m/220 models w/N connectors add \$10 special order
435-10C 430-440MHz 200w N bandpass filt 109.99
445-10C 440-450MHz 200w N bandpass filt 109.99

DC SALES (DCS)

Tenna Hitch Antenna mount for trailer hitch \$ 35.99

DAIWA (DAI)

CN-101 1.8-150 15/150/1.5kw SWR/pwr meter/light \$ 99.99
CN-103M 140-525 20/200w SWR/power meter 99.99
CN-410M 3.5-150 15/150w mobile meter 124.99
CN-460M 140-450 15/150w mobile meter 124.99
CN-801H 1.8-200 20/200/2kw SWR/pwr meter 149.99

Daiwa - continued

CN-801V 140-525 20/200w SWR/power meter . 154.99
CS-201 2-position 600 MHz coax switch 26.99
CS-401 4-position 800 MHz coax switch 149.99

DAVIS (DAV)

7400 Perception II indoor WX unit \$129.99
7415 Wizard II-S weather station D 89.99
7425 Wizard III weather station 169.99
7440 Monitor II weather station 269.99
7852 Rain Collector II, 0.01" 69.99
7977 Electronic rain counter, 0.01" D 9.99
7859 External temp/humd Sensor II; 7440 109.99
7862 Weatherlink Win interface/software ... 139.99
7866 Weatherlink Mac interface/software .. 139.99
7870 Modem adapter for 7862/7866 7.99
7867 Weatherlink Mac to Win conv kit 50.99
7868 Weatherlink Win to Mac conv kit 50.99
7873 Cig lighter power cord 9.99
7876-040 4-conductor 40' extension cable 18.99
7878-040 6-conductor 40' extension cable 22.99
7880 8-conductor 25' junction box cable .. 15.99
7881 8-conductor 50' junction box cable .. 25.99
7882 8-conductor 100' junction box cable 45.99
7890 Mast mount for anemometer 16.99
0131 Weather forecasting quick reference card 9.99
0271 Turbo Meter handheld dig wind indicator 99.99
0281 Wind Wizard handheld wind indicator .. 46.99

DELOME (DEL)

Topo USA US topographical maps CD-ROM .. \$ 99.99
Earthmate Laptop PC GPS/Street Atlas soft . 159.99

DIAMOND (DIA)

SWR/POWER METERS

SX-20C HF/6m/2m 30/300w meter \$ 89.99
SX-40C 144-470 (220 w/correction) 15/150w 79.99
SX-100 1.6-60 MHz 30/300/3kw PEP meter .. 134.99
SX-200 1.8-200 MHz 5/20/200w PEP meter .. 94.99
SX-400 140-525 MHz 5/20/200w PEP meter .. 114.99
SX-600 Dual band 1.8-160/140-525 200w PEP mtr 169.99
SX-1000 1.8-160/430-1300MHz 200w PEP meter . 214.99

HT & HANDHELD SCANNER ANTENNAS

RH-3 2m/440 1.75" BNC mini HT duck \$ 24.99
RH-77CA 2m/440 15" BNC rubber gain ant ... 24.99
RH-205 2m 3/4 wave telescopic HT antenna ... 24.99
RH-519 2m/440 8.3" flexible BNC whip 27.99
RH-707 2m/440 8 3/4" tiltable BNC whip 33.99
RH-951S 2m/440/1.2GHz 15" BNC slim duck 44.99
SRH-519 2m/440 8.3" flexible SMA whip 32.99
SRH-805 2m/440/1.2GHz 1.75" SMA ant 27.99
SRH-815 2m/440/1.2GHz 6" flex SMA whip .. 36.99

MONO-BAND MOBILE ANTENNAS

NR-2C 2m 4.1db 55.5" mobile antenna \$ 39.99
NR-124 1.2GHz 8.4db 25" type N mobile ant 59.99
SG-2000HD 2m 5.2db 62.6" 250w mob ant .. 89.99
SG-6000NMO 52-54 2.15db 39" NMO mob ... 64.99

DUAL-BAND MOBILE ANTENNAS

CR-214S 2m/220 2.1/3.4db 37" mobile ant D \$ 49.99
CR-224A 2m/220 5/6db 69" mobile antenna 99.99
NR-72BNMO Black 2m/440 2.15db 14" NMO 41.99
NR-73BNMO Blk 2m/440 2.15/5.5db 34" NMO 57.99
NR-770HA 2m/440 3/5.5db 40" mobile ant .. 56.99
NR-770HB Black 2m/440 3/5.5db 40" mobile 59.99
NR-770HNMO 2m/440 3/5.5db 40" NMO mobile 56.99
NR-770HBNMO Blk 2m/440 3/5.5db 40" NMO 59.99
NR-770RA 2m/440 3/5.5db 39" mobile ant ... 51.99
NR-770SA 2m/440 2.15db 16.5" mobile ant D 39.99
SG-7000A 2m/440 2.15/3.8db 19" mobile 69.99
SG-7200NMO 2m/440 3.2/5.7db 38" NMO ...D 79.99
SG-7500A 2m/440 3.5/6db 41" mobile ant ... 79.99
SG-7500NMO 2m/440 3.5/6db 41" NMO ant ... 79.99
SG-7900A 2m/440 5/7.6db 62" mobile ant ... 114.99

TRI-BAND MOBILE ANTENNAS

CR-320A 2m/220/440 2.15/3.8/5.5db 36" \$ 89.99



Diamond - continued AES Price

CR-627B	6m/2m/440 2.15/4.5/7.2db 60" ant	99.99
CR-627BNMO	6m/2m/440 2.15/4.5/7.2db 60"	99.99
HV-7A	10/6/2m/440 54" UHF base mobile ant	109.99
HVC-7	40m loading coil for MV-3A	39.99
HVC-14	20m loading coil for MV-3A	37.99
HVC-18	17m loading coil for MV-3A	37.99
HVC-21	15m loading coil for MV-3A	27.99
NR-2000NA	2m/440/1.2 3/6/9.7db 39" N mob	89.99
D-505	Mobile 40-1500MHz 20db receive ant	119.99

MAGNET MOUNTS

DPK-4NM-M	Hvy mag mt, Yae N, 45" max ..D	\$ 34.99
DPK-4NM-N	Hvy dty mag mt, cbl, N, 45" max	45.99
K-702M	Hvy dty mag mt, 6 3/4" dia, 50" max	49.99
MCR-M	Mag mt HT base/coax/tilt BNC	19.99
SPM-35	Hvy dty mag mt, cable, 45" max	39.99
SPM-NMO	Hvy dty NMO mag mt, cbl, 45" max	44.99

TRUNK LIP MOUNTING KITS

K-200	Folding hatch/tnk mt; NR/SG ants	\$ 34.99
K-200KM	Folding hatch/tnk mt/coax; NR/SG ..	62.99
K-400	Hatch/trunk mt; NR/SG antennas	39.99
K-400C	Hatch/trunk mt w/coax; UHF mount ..	69.99
K-400CNMO	Hatch/trunk mt w/coax; NMO mt ..	69.99
K-400-3/8C	Trunk mount w/6' cable; 3/8" dia ..	69.99
C-110	10' extension cable for K-400-3/8C	14.99
K-400N	Hatch/trunk mt w/coax & type N	74.99
K-412C	Light duty hatch/tnk mt w/coax; UHF mt	64.99
K-412CNMO	Light duty hatch/tnk mt w/coax; NMO	64.99
K-600M	Tilt angle trunk mt w/cable	57.99
K-600P	Tilt angle trunk mt w/cable, Yae N ..D	44.99
K-601M	SO-239 hideaway trunk mt, 6' coax ..	69.99
K-601NMO	NMO hideaway trunk mt, 6' coax ..	69.99
C-110	10' extension cable for K-601 mts ..	14.99
K-9000LRM	Motorized luggage rack mount ..	109.99
K-9000TM	Motorized trunk/hatchback mt	109.99

GUTTER MOUNTS & KITS

K-300	Folding gutter mt; NR/SG antennas ..	\$ 29.99
K-300C	Gutter mt w/cable; UHF mount	59.99
K-300KM	Folding gutter mt w/coax; NR/SG ..	67.99

MIRROR & LUGGAGE RACK MOUNTS & KITS

K-540	Mirror/luggage rack mount	\$ 35.99
K-540KM	Mirror/luggage rack mt w/coax	59.99
K-550*	Luggage mt; new mini vans (use GLP)	44.99
K-550KM*	Luggage mt w/50-239 base/coax	69.99
*K-550 series not recommended for Yaesu ATAS-100		

MOUNTING GROUP HARDWARE

C-101	SO-239 mt, 6.5' RG-316 low-loss coax	\$ 29.99
C-101NMO	NMO mt, 6.5' RG-316 low-loss coax	29.99
C-110	10' ext cable; C-101/K-601/K-400-3/8C	14.99
C-110BNC	10' extension cable to BNC male ..	22.99
C-211	SO-239 mt, 6.5' coax, 10' coax extend	39.99
C-213	SO-239 mt, 13.5' RG-316 low-loss coax	37.99
C-213NMO	NMO mt, 13.5' RG-316 low-loss coax	37.99
GLP-5	UHF base mtg group hrdwr; mini coax	10.99
GLP-5N	UHF mtg grp hrdwr; mini coax, Yae N	12.99
GLP-58	UHF base mounting group hardware	10.99
NMO-UHF	Adapter to NMO; not for SG, 45" max ..D	12.99

MULTIBAND HF BASE VERTICAL ANTENNAS

CP-5	80/40/20/15/10m 200w PEP 15' vert	D \$279.99
CP-6	80/40/20/15/10/6m 200w PEP 15' vert	D 299.99
CP-6A	80/40/20/15/10/6m 200w PEP 16' vert	299.99

MONO-BAND BASE STATION ANTENNAS

CP-22E	2m 6.5db 9' base antenna	\$ 59.99
DP-GH62	6m 6db 21' base antenna	147.99
F-22A	2m 6.7db 10.5' base antenna	99.99
F-22J	143.5-146.5MHz 6.7db 10.5' base ant	99.99
F-23A	2m 7.8db 15' base antenna	127.99
F-23C1	148-154MHz 7.8db 15' comm base ..	173.99
F-23C2	150-160MHz 7.8db 15' comm base ..	173.99
F-23J	143.5-146.5MHz 7.8db 15' base ant ..	159.99
F-718A	440 11.5db 15' type N base antenna	209.99
F-718L	420-430MHz 11.5db ATV N base ant	219.99

Diamond - continued AES Price

DUAL-BAND BASE STATION ANTENNAS

U-200	440/1.2GHz 8.3/11.7db 6' N base ant	\$129.99
X-50A	2m/440 4.5/7.2db 5.6' base antenna	99.99
X-50NA	2m/440 4.5/7.2db 5.6' base N ant ..	99.99
X-200A	2m/440 6/8db 8.3' base antenna	139.99
X-500HA	Hvy duty 2m/440 8.3/11.7db 17.8' ant	239.99
X-500HNA	Hvy duty 2m/440 8.3/11.7db 17.8' N ant	239.99
X-510MA	2m/440 8.3/11.7db 17.2' base ant	189.99
X-510NA	2m/440 8.3/11.7db 17.2' type N ant	189.99
X-510NJ	143.5-146.5/428-442MHz 17.2' N Δ	169.99
X-700HA	2m/440 9.3/13db 24' type base ant	399.99
X-700HNA	2m/440 9.3/13db 24' type N ant ..	399.99
X-2200A	2m/220 6/7.8db 11.5' base ant	173.99

TRI-BAND BASE STATION ANTENNAS

D-130J	25-1300 MHz 200w discone ant	\$ 89.99
U-5000A	2m/440/1.2GHz 4.5/8.3/11.7db 6' N	139.99
V-2000A	52-54MHz/2m/440 2.1/6.2/8.4db 8.3'	162.99
X-3200A	2m/220/440 6/7.8/8db 10' base	209.99
X-6000A	2m/440/1.2 6.5/9/10db 10.5' N	199.99
D-707E	Base 40-1500MHz 20db receive ant	179.99

DUPLEXERS & TRIPLEXERS

MX-37	HF-440/1.2 100/50w N duplexer	\$ 64.99
MX-62M	HF-6m & 2m/440, 12" cables dplx ..	74.99
MX-72D	HF-2m/440 400/150/100w duplexer	43.99
MX-72N	As MX-72D, w/12" cables	46.99
MX-72H	As MX-72D, type N on 440, 12" cables	49.99
MX-214	2m/220 150/100w w/12" cables ..D	59.99
MX-214D	As MX-214, no cables	69.99
MX-324	2m/220/440 triplexer	99.99
MX-324D	As MX-324, no cables	99.99
MX-2000	HF-6m/2m/440 400/400/250w triplexer	84.99
MX-2000D	As MX-2000, no cables	79.99
MX-3000	HF-2m/440/1.2 400/200/100w triplexer	79.99
MX-3000D	As MX-3000, no cables	49.99
MX-3000N	As MX-3000, type N, 12" cables ..	85.99

ACCESSORIES

CA-35R	DC-500MHz 400w lightning protect ..	\$ 29.99
CX-210A	1.5kw DC-1000MHz coax switch	44.99
CX-210N	1.5kw DC-1500MHz N coax switch ..	74.99
CX-310A	HD 3-pos DC-800MHz coax switch ..	83.99
DL-30A	15/100w peak 0-500MHz dummy load	27.99
DL-30N	15/100w peak 0-500MHz N dummy load	39.99
GZV-4000	Variable 40A switching ps/meter/spkr	179.99
HB-400	HT air vent dash mount	14.99
HB-450	HT adjustable air vent dash mount	D 29.99
HB-650	HT door mt; side wind/glv bx	D 29.99

Diamond Systems (DSY)

DSI-IBM-N	Novice Class License software ..	\$ 4.99
DSI-IBM-T	Technician Class License soft	6.99
DSI-IBM-NC	No Code Tech Class License soft ..	9.99
DSI-IBM-A	Advanced Class License soft	9.99

DIGIMAX (DIG)

B-12	Dry cell holder, switch; D-612	\$ 99
BAC-5	Nicad pack; D-500/D-510A	D 2.99
BAC-12	Nicad pack; D-612/D-1200	D 2.99

DRAKE (DRA)

TNC-270	9600 bps controller; TR-270	Δ \$249.99
R-8B	Shortwave receiver	1199.99
MS-8	1592 Speaker	49.99
1590	35-55, 108-174 MHz VHF converter ..	219.99
7852	R-8B technical manual	39.99
1591	Interface computer soft; original R-8 ..D	2.99
SW-8	Shortwave/air/FM receiver	799.99
1595	Carrying case for SW-8	49.99
1334	Mobile mount kit for SW-1/SW-2	9.99
1594	Remote control for SW-2	49.99
2051	Tilt/carry handle for SW-1/SW-2	4.99

EASY-UP (UPS OK) (EAS)

EZ 29-24	Double strap chimney mount	\$ 12.99
EZ 48-3ABX	3' boxed tripod w/pitch pad kit ..	24.99

Easy Up - continued AES Price

EZ 48-5ABX	5' boxed tripod w/pitch pad kit ..	34.99
EZ-516	5' 16 ga steel mast	pick-up only 7.99

EDCO (EDC)

TX-146	2m 50w 40db 3-stage helical filt ...D	\$ 19.99
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EMERSON (EME)

EAN-3400	HDTV dig-ready amp omni TV ant ...D	\$ 49.99
ESR-220	Solar/dynamo AM/FM radio/flashlight	29.99
ETA-333	Dual voltage foreign travel converter kit	19.99
EVO-6500	900MHz wireless vid obs sys/5" mon	169.99
EVO-6550	2nd 900MHz camera; EVO-6500	99.99
RP-001	12-function mini stainless multi tool	6.99
RP-005	6-func flashing safety strobe/reflector	6.99
RP-103	12-function stainless multi tool	6.99

FREEPLAY (BAY)

FPR-1B	AM/FM/5.8-18SW 30min Freeplay radio	D \$ 49.99
SWL Antenna/FPA-7	Indoor SW antenna	19.99
FPR-2	AM/FM 60 minute Freeplay radio	Δ 49.99
FPR-2SC	AM/FM/solar clear case Freeplay	79.99
FPR-2SM	AM/FM/solar gray case Freeplay ..	Δ 49.99
FPR-2SGSW	AM/FM/5-18SW/solar 60min Freeplay	99.99
AC Adapter/FPA-3	For FPR-2 series radio ..	10.99
Headphones/FPA-1	For FPR-2 series radio ..	14.99
SWL Antenna/FPA-7	Indoor SW ant; FPR-2SGSW	19.99
S360-BL	AM/FM/solar trans blue 15 hr Freeplay	69.99
S360-C	AM/FM/solar clear case 15 hour Freeplay	69.99
FP-SL	Yellow self powered Freeplay lantern ..	69.99
FP-SL-C-BL	Translucent blue self powered lantern	Δ 39.99
Bulb/FPA-11	2-pack replacement bulbs	9.99
FPS-10/FPA-10	Patch cord for 3V output ..	6.99

Gamber-Johnson (GAM)

SS-100	Super slide mount w/ant plug	\$ 79.99
SS-101	Extra base for SS-100	44.99

GAP VERTICALS (GAP)

DX-VIII	Challenger 75*/40/20/15/12/10/6/2m 31.5'	\$279.99
*80m CW w/capacitor exchange from GAP		
Challenger Counterpoise		25.99
(SYN) 100' 1/2" black double braided rope	..	6.99
DX-VI	Eagle 40/20/17/15/12/10m 21.5' rigid	289.99
DX-IV	Voyager 160/80/40/20m 45'; use 350' guy	399.99
Voyager Counterpoise		50.99
(SYN) 350' 3/8" black double braided rope	..	39.99
Titan DX	75*/40/30/20/17/15/12/10m, 25' ..	319.99
*80m CW w/capacitor exchange from GAP		
100' Guy Kit with clamp		14.99
200' Guy Kit with clamp		22.99
Ground Mount	Quick tilt mt for vertical ant ..	69.99
Ladder Mount	Quick tilt mt; campers/RVs	69.99

GARMIN (GAR)

GPS-12CX	Color GPS receiver	\$269.99
GPS-12XL	GPS receiver	219.99
GPS-III Plus	GPS handheld mapping unit	369.99
GA-26C	Low prof rem ant/cbl; GPSIII/III Plus	89.99
GA-27C	Low prof rem ant/cbl; GPS-12CX/XL	89.99
010-10048-00	Mounting bracket; 12CX/XL ..	31.99
010-10082-00	Power/data cable	27.99
010-10085-00	Cig lighter adapter cable ...	23.99
010-10111-00	Mtg bkt; GPS-III/III Plus	31.99
010-10117-01	Carrying case	12.99
010-10121-00	MCX-BNC adapt cbl; 12CX/XL	25.99
010-10141-00	PC interface cable	38.99
010-10165-00	PC cable w/cig adapter	45.99
010-10215-00	MapSource US CD; GPS-III Plus	99.99
StreetPilot	12 ch GPS receiver	469.99
GA-26C	Low prof remote ant w/cable/BNC	89.99
010-10082-00	Power/data cable	27.99
010-10085-00	Cig lighter adapter	23.99
010-10141-00	PC interface cable	38.99
010-10165-00	PC cable w/cig adapter	45.99
010-10199-03	Carrying case	24.99



Garmin - continued

	AES Price
010-10215-00 MapSource US road&rec CD	99.99
010-10215-03 MapSource MetroGuide CD	149.99
010-10227-00 Blank 8MB memory cartridge	99.99
010-10232-00 Carrying case	24.99
eMAP Deluxe GPS/mapping/8MB datacard/PC cbl	299.99
GA-27C Low profile remote ant/cable/MCX	89.99
010-10121-00 MCX to BNC adapter cable	25.99
010-10215-00 MapSource US road&rec CD	99.99
010-10215-03 MapSource MetroGuide CD	149.99
eTRES 12 ch mini GPS receiver	145.99
eTRES Summit 12ch mini GPS/compass/barometric	249.99
010-10203-00 Cig lighter cbl; eMAP & eTRES	39.99
010-10205-00 Data cable; eMAP & eTRES	22.99
010-10206-00 PC interface cbl; eMAP & eTRES	38.99
NavTalk Analog cellular phone/GPS combo	399.99
010-10215-00 MapSource US road&rec CD	99.99

GEOCHRON (GEO)

World Watch Day/night Windows software	\$ 49.99
Std Blk/Gold* Std black/gold trim world clock/map	999.99
Std Oak/Gold* Std oak/gold trim world clock/map	999.99

\$100 factory rebate Geochron world clock thru 12/31/00

*These items are drop-shipped (shipped direct to you from the Geochron factory). On factory drop-shipments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Redwood City, California via UPS, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on this special order item.

GLEN MARTIN (GME)

ROOF TOP TOWERS

RT-424 4.5' roof-top tower, 6 sq ft	\$163.99
RT-832 8' roof-top tower, 8 sq ft	242.99
RT-936 9' roof-top tower, 18 sq ft	396.99
RT-1832 17.5' roof-top tower, 12 sq ft	530.99
MC-10 Mast clamp; 2 required	24.99
TB-25 Thrust bearing (2 sealed bearings)	79.99
LB-3755 Set of 8 3/8" x 5" lag bolts	9.99
EL-3755 Set of 8 concrete L bolts	14.99
RA-6024 24" side arm for roof tower	41.99
RA-6048 48" side arm for roof tower	53.99

TOWERS

M-1330A 30' alum tower 12 sq ft w/Hazer	1615.99
M-1340A 40' alum tower 12 sq ft w/Hazer	1832.99
M-1350A 50' alum tower 12 sq ft w/Hazer	2070.99
M-1840A 40' alum tower 16 sq ft w/Hazer	2150.99
M-1850A 50' alum tower 16 sq ft w/Hazer	2410.99
M-1860A 60' alum tower 16 sq ft w/Hazer	3356.99
M-1870A 70' alum tower 16 sq ft w/Hazer	3660.99
ML-1800 Messenger line kit; GME towers	72.99
KB-1000 57" side arm; M-13 series	81.99
KB-1300 57" side arm; M-18 series	83.99
M-22 10' galv steel M-22 tower section	405.99
CHB-22 Footing assembly for M-22	261.99
B-22 Leveling base for M-22	379.99

LIGHTNING PROTECTION

LR-8400 Lightning rod kit (complete)	\$ 89.99
GR-4400 Ground rod wire clamp	6.99
GR-5080 8' x 5/8" ground rod	20.99
TL-0470 Terminal lug	2.99
LR-8418 Lightning rod point, 18" long	28.99
LR-8452 Clamp; hold lightning rod to 2" mast	26.99
LR-8451 Clamp; hold lightning rod-1 1/2" mast	24.99
CW-2540 25' #4 bare copper ground wire	19.99
CW-5040 50' #4 bare copper ground wire	39.99
CW-7540 75' #4 bare copper ground wire	58.99
CW-1040 100' #4 bare copper ground wire	66.99
CW-1240 125' #4 bare copper ground wire	97.99
CW-1540 150' #4 bare copper ground wire	117.99

HAZERS

H-2 175 lb load 12 sq ft HD aluminum Hazer	\$361.99
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Glen Martin - continued AES Price

H-3 150 lb load 8 sq ft std aluminum Hazer	274.99
H-4 200 lb load 16 sq ft galv steel Hazer	349.99
BW-8001 Brake winch for H-2/3/4	77.99
HR-2040 Roller bearing set for Hazers	64.99
HR-6010 T-X plates for H-2/3/4/5	26.99
HS-1301 Side arm for Hazers	64.99
ML-2500 Messenger line kit; Rohn towers	76.99
VH8-60 Hazer - for 60' Rohn 45G	1410.99
VH8-70 Hazer - for 70' Rohn 45G	1545.99
VH9-50 Hazer - for 50' Rohn 55G	1331.99
VH9-60 Hazer - for 60' Rohn 55G	1455.99
VH9-70 Hazer - for 70' Rohn 55G	1567.99

BUYING

HP-3000 Kevlar guy cable, 3000#	per ft \$.99
HP-4500 Kevlar guy cable, 4500#	per ft 1.49
HP-7500 Kevlar guy cable, 7500#	per ft 1.99
WR-125 1/8" galv 7 x 7 guy cable	per ft .49
WRS-156 3/8" SS 7 x 19 guy cable	per ft .79
WRS-187 3/8" SS 7 x 19 guy cable	per ft .89
WRS-250 1/4" SS 7 x 19 guy cable	per ft .99
WR-1862 3/8" U-bolt clip	1.69
WR-2565 1/4" U-bolt clip	1.69
WR-3164 1/2" U-bolt clip	1.99
PT-2500 1/2" heavy duty thimble	2.69
PT-3100 3/8" heavy duty thimble	2.99
PT-3700 3/4" heavy duty thimble	3.39
H-165 1/2" end cap	.79
H-164 3/4" end cap	.89
H-142 3/8" end cap	.99

RG-4010 Lap link	7.99
ES-40 4" dia x 30" earth screw	21.99
EG-40 4" dia x 30" galv earth screw	32.99
EG-60 6" dia x 48" earth screw	38.99
EG-60 6" dia x 48" galv earth screw	54.99
ES-80 8" dia x 66" earth screw	67.99
TB-3806 3/8" x 6" galv turnbuckle	17.99
TB-5009 1/2" x 9" galv turnbuckle	23.99
TB-6212 3/8" x 12" galv turnbuckle	40.99

MASTS

M-1049 9' 1.92" OD galv steel mast	\$ 76.99
M-1040* 10' 1.92" OD galv steel mast	118.99
MA-1040* 10' 1.92" OD aluminum mast	122.99
*Truck, freight collect on M-1040 & MA-1040	
MA-1049 9' 1.92" OD aluminum mast	90.99
MA-2069 9' 2.375" OD aluminum mast	121.99
MA-1050 5' 1.92" OD aluminum mast	62.99
MA-5050 5' 1.33" OD aluminum mast	41.99
MP-1409 9' 2" OD .250 wall xtra HD fg mast	120.99
MP-1809 9' 2" OD .125 wall med dty fg mast	70.99

WINCHES

B-800 800 lb capacity w/4.5:1 gear ratio	\$ 71.99
W-1100 1100 lb capacity w/3.9:1 gear ratio	39.99
W-1300 1300 lb capacity w/17:1 gear ratio	57.99
B-2000 2000 lb capacity w/17:1 gear ratio	125.99

All \$25+ GLEN MARTIN orders are shipped PREPAID (except M-1040 & MA-1040) at Glen Martin's expense direct to you from the factory (48 states). We prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your order. Please allow sufficient delivery time. Most truck lines will not unload towers, so please be sure to have enough manpower and/or equipment on hand.

L.L. GRACE (GRA)

KCT Kansas City Tracker satellite package	\$229.99
KCT/T Kansas City Tracker package/KC Tuner	319.99

GROTHE (GRO)

VS-2 Emergency vehicle siren	\$ 89.99
VS-2LS/A Window mt siren/amber halogen	299.99
VS-2LS/B Window mt siren/blue halogen	299.99
VS-2LS/R Window mt siren/red halogen	299.99
VS-3 Volunteer vehicle PA/horn w/spkr	129.99
VS-4 P/A emergency vehicle siren w/spkr	139.99

AES Price

GROVE (GRV)

ANT-20 No-Tenna Inside car rcv ant	Δ \$ 2.99
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GRUNDIG (GRU)

MiniWorld 100PE Mini AM/FM/SW receiver	... \$ 39.99
Satellit 800 AM/FM/SW/LW/aircraft receiver	... 499.99
Traveller II Port AM/FM/SW/LW Rcvr/clock	..D 49.99
Traveller III Digital AM/FM/SW/LW receiver	..D 99.99
Yacht Boy 300PE Port AM/FM/SW/LW Rcvr	... 99.99
Yacht Boy 400PE Port AM/FM/SW/LW Rcvr/ps	... 199.99

HAL (HAL)

DSP-4100 HF DSP modem	special order 1099.99
DXP-38 External DSP HF radio modem	 395.99
P-38 HF DSP modem board	Δ 229.99
PCI-4000/M HF modem	special order 795.99
RTTY-1 RTTY tuning indicator	 99.99
ST-8000 HF modem	special order 3269.99

HARGER (HRG)

GBIS18114AE 1/8" copper entrance ground bar kit	\$ 27.99
GBIS18148AE 1/8" copper station ground bar kit	64.99
GEL3AE Package of 5 HD grounding lugs	15.99
GP1868.78AE 1/8" copper single pt gnd panel kit	54.99
GBX976AE NEMA-4x weatherproof enclosure	101.99

HEIL (HEI)

PRO-SET-4 Deluxe boom mic/headset/HC-4	.. \$130.99
PRO-SET-5 Deluxe boom mic/headset/HC-5	.. 130.99
PRO-MICRO-4 Boom mic/headset/HC-4	 110.99
PRO-MICRO-5 Boom mic/headset/HC-5	 110.99
PRO-5-4 Boom mic/single headset (HC-4)	... 120.99
PRO-5-5 Boom mic/single headset (HC-5)	... 120.99
AD-1-I Pro-Set 8-pin adapter cord for Icom	16.99
AD-1-K Pro-Set 8-pin adapt cord; Kenwood	16.99
AD-1-T Pro-Set 4-pin adapt cord; Ten-Tec	16.99
AD-1-Y Pro-Set 8-pin adapter cord; Yaesu	16.99
AD-1-I-M Pro-Set modular adapt cord; Ico	16.99
AD-1-K-M Pro-Set modular adapt cord; Ken	16.99
AD-1-Y-M Pro-Set modular adapt cord; Yae	16.99

FS-1 Foot switch	29.99
HS-1 Hand switch	24.99
HC-4 DX'er's 'dream machine' mic element	29.99
HC-5 Key microphone element	29.99

AD-100 Microphone/boomset adapter; FT-100	24.99
HMP In-line microphone preamp; Icom	54.99
HMP-M In-line mic pre/mod plug; IC706/MkII	54.99
GM-4 Goldline dual element studio mic w/HC-4	139.99
GM-5 Goldline dual element studio mic w/HC-5	139.99
GM-V Goldline vintage studio mic/matching xfmr	159.99
HM-10-4 Microphone with HC-4 element	64.99
HM-10-5 Microphone with HC-5 element	64.99
HM-10-Dual Mic w/HC-4 & HC-5 elements	114.99

CC-1-I HM-10 8-pin cable for Icom	29.99
CC-1-K HM-10 8-pin cable for Kenwood	29.99
CC-1-T HM-10 4-pin cable for Ten-Tec	29.99
CC-1-Y HM-10 8-pin cable for newer Yaesu	29.99
CC-1-I-M HM-10 modular cable for Icom	29.99
CC-1-K-M HM-10 modular cable; Kenwood	29.99
CC-1-Y-M HM-10 modular cable for Yaesu	29.99
LX-1 Balanced 41" Luxo boom	94.99
MA-1 Adjustable microphone boom	44.99
SB-1 Small adjustable mic boom w/C clamp	32.99
TB-1 Table base microphone stand	24.99

Boom Clip for BM-series	5.99
Ear Pads for BM-series	pair 5.99
Ear Pads for PRO-series	pair 8.99
Ham Radio Handbook	12.95
HD-AT 6db headph attenuator, 1/8"m-1/4" adapt	5.99
SM-1 Shock mount for any microphone boom	49.99
XT-1 Audio matching xfmr; lo-Z mic/tube Xcvr	15.99

HUSTLER (HUS)

RM-80 80m CW 400w PEP resonator	 \$ 26.99
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Hustler - continued AES Price

RM-75	75m phone 400w PEP resonator	26.99
RM-40	40m 400w PEP resonator	24.99
RM-30	30m 400w PEP resonator	24.99
RM-20	20m 400w PEP resonator	21.99
RM-17	17m 400w PEP resonator	21.99
RM-15	15m 400w PEP resonator	15.99
RM-12	12m 400w PEP resonator	15.99
RM-11	CB 400w PEP resonator	15.99
RM-10	10m 400w PEP resonator	15.99
RM-80S	80m CW 2kw PEP resonator	49.99
RM-75S	75m phone 2kw PEP resonator	49.99
RM-40S	40m 2kw PEP resonator	35.99
RM-20S	20m 2kw PEP resonator	28.99
RM-15S	15m 2kw PEP resonator	24.99
RM-11S	CB 2kw PEP resonator	23.99
RM-10S	10m 2kw PEP resonator	23.99
MO-1	54" mast for fender or deck mount	31.99
MO-2	54" mast for bumper mount	31.99
MO-3	54" no break-over mast	23.99
MO-4	22" mast for special applications	19.99
VP-1	Tri-band adapter	5.99
RSS-2	Resonator spring	9.99
QD-2	Stainless quick disconnect	19.99
L-14-144	12' RG-58, PL-259 to lugs	9.99
L-14-240	20' RG-58, PL-259 to lugs	12.99

STAINLESS 2" MOBILE BALL MOUNTS

SSM-1	Ball & spring, cadmium hardware	\$ 46.99
SSM-2	Ball, cadmium hardware	26.99
SSM-3	Stainless steel spring	24.99

1-1/2" MOBILE BALL MOUNTS

C-32	Chrome plated ball	\$ 11.99
C-30	Chrome plated spring	11.99
C-29	Stainless steel spring	17.99
BM-1	Single strap bumper mt w/C-32	21.99

3/8-24 THREAD MOBILE MOUNTS

HLM	Trunk lip mount w/swivel	\$ 22.99
HOT	Hustloff trunk lip mt w/swivel	23.99
MBM	Super magnet mount w/16" coax	19.99
RVM	Recreational vehicle mount	20.99
TLM	Trunk lip mount	21.99

HF ANTENNAS

4-BTV	40/20/15/10m 21' trap vertical	\$119.99
5-BTV	80/40/20/15/10m 25' trap vertical	149.99
30-MTK	30m trap kit for 4-BTV/5-BTV	41.99
6-BTV	80/40/30/20/15/10m 24' trap vert	179.99

VHF/UHF BASE STATION ANTENNAS

G3-144	2m 3db 7.5' vertical antenna	\$ 63.99
G6-144B	2m 6db 10' vertical antenna	114.99
G6-270R	2m/440 6db 7.6' base station ant	159.99
G7-144	2m 7db 15' vertical antenna	159.99
G7-220	220 MHz 7db 10' vertical antenna	149.99
G6-440	440 MHz 6db 7' vertical antenna	139.99

BUSINESS BAND ANTENNA

G6-450-4	6db 470-478 MHz base ant	\$ 89.99
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VHF/UHF MOBILE ANTENNAS

BBG-144	2m 3.4db NMO coil/whip only	\$ 39.99
BBGT-144	2m 3.4db NMO trunk lip mt ant	51.99
BBG-440-5	440 5db NMO coil/whip only	41.99
BBGT-440-5	440 5db NMO trunk lip mt ant	55.99
BBL-144A	2m 3/4" hole mt antenna, 3.4db	39.99
BBLT-144A	2m trunk lip mt ant, 3.4db	47.99
CG-144	2m 1/4-24 ant, 7' high, 5.2db	31.99
CGT-144	2m trunk mt ant, 7' high, 5.2db	51.99
CG-220	220 MHz 1/4-24 ant, 5.2db	31.99
CGT-220	220 MHz 5.2db tnk mt ant	51.99
FX-220	220 3.4db magnetic mt ant	24.99
FX-220B	220 3.4db black mag mt ant	29.99
LMB-144	2m 3.4db black NMO coil/whip only	22.99
LMB-270	2m/440 2.4/4db black NMO coil/whip only	32.99
LMB-440-5	440 5db black NMO coil/whip only	24.99
LMC-144	2m 3.4db NMO coil/whip only	23.99
LMC-270	2m/440 2.4/4db NMO coil/whip only	31.99
LMC-440-5	440 5db NMO coil/whip only	24.99

Hustler - continued AES Price

LMG-144	2m 3.4db NMO pushpin coil/whip only	25.99
LMG-440-5	440 5db NMO pushpin coil/whip only	27.99
MKR-2	Radial kit for SF-2/CG-144	20.99
MX-2	2m 3db black & chrome NMO mag mt ant	34.99
MX-2B	2m 3db all black NMO mag mt ant	39.99
MX-220	220 3db blk & chrome NMO mag mt ant	34.99
MX-220B	220 3db all black NMO mag mt ant	39.99
MX-270	2m/440 2.4/4db blk/chr NMO mag mt ant	58.99
MX-270B	2m/440 2.4/4db all black NMO mag ant	59.99
MX-440	440 5db blk & chrome NMO mag mt ant	36.99
MX-440B	440 5db all black NMO mag mt ant	36.99
RX-2	2m 3.4db magnetic mount ant	24.99
RX-220	220 3.4db magnetic mt antenna	24.99
RX-440	440 5db magnetic mt antenna	24.99
SF-2	2m 1/4-24 ant, 4' high, 3.4 db	14.99
SF-220	220 MHz 1/4-24 antenna, 3 db	14.99
THF	140-500 MHz 1/4 wave trunk mount ant	23.99
UGM	140-500 MHz 1/4 wave BNC mag mt ant	21.99
UHT-1	140-500 MHz 1/4 wave roof mt ant	14.99

CB & MONITOR ANTENNAS

1C-11	White trunk mount CB antenna	\$ 13.99
1C-11B	Black trunk mt CB antenna	13.99
1C-100	White magnetic mount CB antenna	21.99
1C-100B	Black magnetic mt CB antenna	21.99
DTG	25" fg double-talk gutter mt CB ant	41.99
HQ-27	Power Packer 1/4-24 CB whip	17.99
HQ-27M	Power Packer trunk mt CB antenna	36.99
HQD	Dual fg mirror mount CB antenna	49.99
HQT	Single fg mirror mount CB antenna	27.99
RQM	Magnetic mount CB antenna	19.99
RTG-27L	25" CB antenna w/rain gutter mt	26.99
RTS-27L	25" CB antenna w/roof mount	26.99
SCB/BLK	46" black fiberglass CB whip	34.99
SCB/BLU	46" blue fiberglass CB whip	34.99
SCB/RED	46" red fiberglass CB whip	34.99
SCB/WHT	46" white fiberglass CB whip	34.99
SCB-S/BLK	35" black fiberglass CB whip	34.99
SCB-S/BLU	35" blue fiberglass CB whip	34.99
SCB-S/RED	35" red fiberglass CB whip	34.99
SCB-S/WHT	35" white fiberglass CB whip	34.99
DCL	Discone monitor ant w/50' coax & plugs	34.99
DCX	Discone monitor ant; 40-700 MHz	23.99
MOR	Roof/deck mt tri-band monitor ant	18.99
MOT	Trunk lip mt tri-band monitor antenna	19.99

HY-GAIN (HYG)

117	HG-10 10' 2" OD .120 wall steel mast .TA	\$ 39.99
184	14RMQ Roof kit-12/14AVQ, 18AVT	19.99
189S	GRK-88 Ground radial kit	39.99
190S	RRK-88 Roof radial kit	49.99
191S	160MK-88 160m kit for 188S	89.99
216S	216SAT 2m 16el 145.9MHz boom	129.99
381S	19PD 80-10 233' 1-band port dip	149.99
2400-155	62400155 Boom mic/headset	49.99

MULTI-BAND VERTICAL ANTENNAS

AV-620	20/17/15/12/10/6m vertical ant	\$269.99
AV-640	40/30/20/17/15/12/10/6m vertical	359.99

ANTENNA ROTORS

AR-40	3 sq ft antenna rotor/5-wire	\$269.99
CD-45-II	8.5 sq ft antenna rotor/8-wire	369.99
HAM-IV	15 sq ft antenna rotor/8-wire	529.99
HAM-V	Digital 15 sq ft antenna rotor/8-wire	899.99
HDR-300A	Hvy duty dig 25 sq ft rotor/8-wire	1229.99
T-2X	Tailtwister 20 sq ft antenna rotor/8-wire	619.99
T-2XD	Tailtwister dig 20 sq ft ant rotor/8-wire	979.99

OPTIONAL ACCESSORIES FOR ROTORS

DCU-1	Digital rotor control; HAM-IV/T-2X	\$619.99
MSHD	Lwr mast support; HAM-IV/T-2X/XD	81.99
MSLD	Lower mast support; CD-45II/AR-40	29.99
TSP-1	Tower spacer plate	29.99

See BELDEN for rotor cable

AES Price

ICOM (ICO)

IC-781	Xcvr/Rcvr/ps/tuner/scope special order	6999.99
CT-17	CI-V level converter	139.99
FL-103	2.8 KHz 9 MHz IF SSB filter	109.99
OPC-478	PC to radio cable	45.99
IC-775DSP	Xcvr/ps/keyer/tuner/IF-DSP	3499.99
CR-282	High stability crystal unit	149.99
CT-17	CI-V level converter	139.99
FL-53A	250 Hz 455 KHz IF CW filter	189.99
FL-101	250 Hz 9 MHz IF CW filter	119.99
FL-102	6 KHz 9 MHz IF AM filter	94.99
FL-222	1.9 KHz 455 KHz IF SSB filter	199.99
FL-223	1.9 KHz 9 MHz IF SSB filter	99.99
FL-257	3.3 KHz 455 KHz IF SSB filter	189.99
HM-36	Scanning hand mic	74.99
MB-19	Rack mounting handles	74.99
OPC-478	PC to radio cable	45.99
SM-6	Desk microphone	119.99
SM-8	2-connector desk mic/up/down scan	169.99
SM-20	Deluxe desk microphone	219.99
SP-20	Speaker w/audio filter	249.99
SP-21	External speaker	119.99
IC-756PRO	Xcvr/Rcvr/6m/IF-DSP/tuner/keyer	2899.99
FREE CD service manual from Icom! thru 12/31/00 USA only		
FREE clock from Icom! 1st 1000 units - until gone! USA only		
PS-85	Switching power supply	299.99
AH-4	80-6m 120w auto wire ant tuner	319.99
AH-2B	Bpr mt/whip; 40-6m use tuner	299.99
AH-2B extra whip only		49.99
CT-17	CI-V level converter	139.99
HM-36	Scanning hand mic	74.99
OPC-478	PC to radio cable	45.99
SM-6	Desk microphone	119.99
SM-8	2-connector desk mic/up/down scan	169.99
SM-20	Deluxe desk microphone	219.99
SP-20	Speaker w/audio filter	249.99
SP-21	External speaker	119.99
UT-102	Voice synthesizer	74.99
IC-746	Xcvr/Rcvr/6m/2m/IF-DSP/tuner/mic	*1349.99
*Price w/instant coupon; coupon expires 12/31/00		
Icom logbook FREE w/IC-746! Limited Time!		
PS-85	Switching power supply	299.99
AH-4	80-6m 120w auto wire ant tuner	319.99
AH-2B	Bpr mt/whip; 40-6m use tuner	299.99
AH-2B extra whip only		49.99
CR-282	High stability crystal unit	149.99
CT-17	CI-V level converter	139.99
RS-746	Win remote control software	79.99
FL-52A	500 Hz 455 KHz IF CW filter	189.99
FL-53A	250 Hz 455 KHz IF CW filter	189.99
FL-96	2.8 KHz 455 KHz IF SSB filter	169.99
FL-100	500 Hz 9 MHz IF CW filter	119.99
FL-101	250 Hz 9 MHz IF CW filter	119.99
FL-103	2.8 KHz 9 MHz IF SSB filter	109.99
FL-222	1.9 KHz 455 KHz IF SSB filter	199.99
FL-223	1.9 KHz 9 MHz IF SSB filter	99.99
FL-232	350 Hz 9 MHz IF CW/RTTY filter	99.99
FL-257	3.3 KHz 455 KHz IF SSB filter	189.99
OPC-478	PC to radio cable	45.99
SM-6	Desk microphone	119.99
SM-8	2-connector desk mic/up/down scan	169.99
SM-20	Deluxe desk microphone	219.99
SP-21	External speaker	119.99
UT-102	Voice synthesizer	74.99
CR-338	High stability crystal unit; IC-707	69.99
UT-30	Tone encoder; IC-707	49.99
IC-718	HF Xcvr/SW Rcvr/mic	*699.99
*Price w/instant coupon; coupon expires 12/31/00		
PS-85	Switching power supply	299.99
AH-4	80-6m 120w auto wire ant tuner	319.99
AH-2B	Bpr mt/whip; 40-6m use tuner	299.99
AH-2B extra whip only		49.99
AT-180	Auto coax antenna tuner; HF+6m	499.99



Icom - continued

AES Price

OPC-598	23' extension cable for AT-180	69.99
CR-338	High stability crystal unit	81.99
CT-17	CI-V level converter	139.99
FL-52A	500 Hz 455 KHz IF CW filter	189.99
FL-53A	250 Hz 455 KHz IF CW filter	189.99
FL-96	2.8 KHz 455 KHz IF SSB filter	169.99
FL-222	1.9 KHz 455 KHz IF SSB filter	199.99
FL-257	3.3 KHz 455 KHz IF SSB filter	189.99
Suggest dealer installation of filters in IC-718		
MB-5	Mobile mount	59.99
MB-23	Side mount carrying handle	15.99
OPC-478	PC to radio cable	45.99
SM-6	Desk microphone	119.99
SM-8	2-connector desk mic/up/down scan	169.99
SM-20	Deluxe desk microphone	219.99
SP-7	Small external speaker	94.99
SP-20	Speaker w/audio filter	249.99
SP-21	External speaker	119.99
UT-102	Voice synthesizer	74.99
UT-106	Plug-in DSP	149.99
IC-706 Mk II-G* Mini Xcvr/Rcvr/6m/2m/440/DSP † *1049.99		
*Price w/instant coupon; coupon expires 12/31/00		
Custom Heil boom mic/headset FREE from Icom		
w/IC-706 Mk II-G! thru 12/31/00		
706IIG/AH4 IC-706 Mk II-G/AH-4 combo † *1339.98		
*Price w/instant coupon; coupon expires 12/31/00		
Custom Heil boom mic/headset FREE from Icom		
w/706 II-G/AH-4! thru 12/31/00		
706IIG/AT180 IC-706 Mk II-G/AT-180 combo † *1499.98		
*Price w/instant coupon; coupon expires 12/31/00		
Custom Heil boom mic/headset FREE from Icom		
w/706 II-G/AT-180! thru 12/31/00		
(BET) 706 Tune Control for IC-706-series ...		32.99
PS-85	Switching power supply	299.99
AH-4	80-6m 120w auto wire ant tuner	319.99
AH-2B	Bpr m/whip; 40-6m use tuner	299.99
AH-2B	extra whip only	49.99
AT-180	Auto coax antenna tuner; HF+6m ..	499.99
OPC-598	23' extension cable for AT-180	69.99
CR-282	High stability crystal unit; Mk II G.	149.99
Suggest dealer install; CR-282, IC-706 Mk II-G		
CT-17	CI-V level converter	139.99
FL-100	500 Hz 9 MHz IF CW filter	119.99
FL-101	250 Hz 9 MHz IF CW filter	119.99
FL-103	2.8 KHz 9 MHz IF SSB filter	109.99
FL-223	1.9 KHz 9 MHz IF SSB filter	99.99
FL-232	350 Hz 9 MHz IF CW/RTTY filter	99.99
HM-95	TTP microphone	59.99
HM-118T	TTP microphone	59.99
MB-62	Mounting bracket for main unit	25.99
MB-63	Mounting bracket for control panel	18.99
MB-65	Mounting base platform	35.99
MB-72	Carrying handle; Mk II-G only	14.99
OPC-025D	Extra DC cord	29.99
OPC-478	PC to radio cable	45.99
OPC-581	11.5' separation cable	60.99
OPC-587	16' separation cable	79.99
OPC-599	7+8-pin to 13-pin adapter	60.99
OPC-742	13-pin cable	60.99
RMK-706	Package; MB-62/MB-63/OPC-581	70.99
SM-6	Desk microphone	119.99
SM-8	2-connector desk mic/up/down scan	169.99
SM-20	Deluxe desk microphone	219.99
OPC-589	8-pin to jack adapt; SM-6/8/20	35.99
SP-7	Small external speaker	94.99
UT-102	Voice synthesizer	74.99
AH-710	1.9-30 MHz 80' folded dipole	299.99
PW-1	160-6m linear amplifier/ps/tuner	5399.99
OPC-137	Adapter cable; older Icom Xcvr .D	19.99
UT-86	Tone squelch; IC-706 Mk II only	69.99

RECEIVERS

R-1*	1MHz-1.3GHz AM/FM handheld Rcvr ..D	\$299.99
HP-4	Lightweight headphones	29.99

Icom - continued

AES Price

R-2-06	.5M-1.3G AM/FM hand/batts/cgr/cell blkd †	179.99
CSW-HHRX soft/cbl FREE from Icom w/R-2-06! thru 12/31/00		
R-2-07*	.5MHz-1.3GHz AM/FM hand Rcvr ..†	179.99
CSW-HHRX soft/cbl FREE from Icom w/R-2-07! thru 12/31/00		
AD-92SMA	SMA- BNC adapter	16.99
BC-127A	Extra nicad charger	20.99
CS-R2	DOS programming software; R-2	13.99
OPC-474	Cloning cable (R-2 to R-2)	18.99
OPC-478	PC - radio programming cable	45.99
CSW-HHRX	Win prog soft/cable; R-2/R-10	50.99
HP-4	Lightweight headphones	29.99
LC-146	Carrying case	38.99
SP-13	Earphone	4.99
R-3-27*	.5MHz-2.45GHz AM/FM/TV hand Rcvr	499.99
BC-135	Desktop charger w/adapter cup	80.99
BP-206	Extra 3.7v 1650ma lith ion batt	63.99
CP-18	Cig lighter converter	30.99
CS-R3	Win programming software	24.99
OPC-478	PC - radio programming cable	45.99
LC-151	Carrying case	24.99
R-10-05	.5M-1.3G AM/FM/SSB hand/cell blkd †	*299.99
*Price w/instant coupon; coupon expires 12/31/00		
CSW-HHRX soft/cbl FREE from Icom w/R-10-05! thru 12/31/00		
R-10-15*	.5MHz-1.3GHz AM/FM/SSB HH Rcvr †	*299.99
*Price w/instant coupon; coupon expires 12/31/00		
CSW-HHRX soft/cbl FREE from Icom w/R-10-15! thru 12/31/00		
CP-12L	Right angle cig cable w/filter	36.99
CS-R10	DOS programming software; R-10	13.99
OPC-474	Cloning cable (R-10 to R-10)	18.99
OPC-478	PC - radio programming cable	45.99
CSW-HHRX	Win prog soft/cable; R-10/R-2	50.99
CT-17	CI-V level converter	149.99
HP-4	Lightweight headphones	29.99
LC-140	Carrying case for R-10	38.99
OPC-254L	Right angle mini DC pwr cable	14.99
SP-13	Earphone	4.99
CK-70	(EX-299) 12v DC option; R-7000	39.99
PCR-100-12	.01-1300 am/fm PC Rcvr/cell blkd †	*199.99
*Price w/instant coupon; coupon expires 12/31/00		
PCR-100-08*	.01-1300 PC controlled Rcvr	*199.99
*Price w/instant coupon; coupon expires 12/31/00		
AH-7000	25-1000 MHz discone ant w/coax	179.99
PCR-1000	.5-1300 am/fm/sb PC Rcvr/cell blkd †	*349.99
*Price w/instant coupon; coupon expires 12/31/00		
PCR-1000-03/07*	.5-1300 PC control Rcvr	*349.99
*Price w/instant coupon; coupon expires 12/31/00		
AH-7000	25-1000 MHz discone ant w/coax	179.99
UT-106	Plug-in DSP unit	149.99
R-75	.03-60 MHz shortwave receiver	*699.99
*Price w/instant coupon; coupon expires 12/31/00		
UT-106 DSP FREE from Icom w/R-75! thru 12/31/00 USA only		
CR-282	High stability crystal unit	149.99
CT-17	CI-V level converter	139.99
FL-52A	500 Hz 455 KHz IF CW filter	189.99
FL-53A	250 Hz 455 KHz IF CW filter	189.99
FL-96	2.8 KHz 455 KHz IF SSB filter	169.99
FL-100	500 Hz 9 MHz IF CW filter	119.99
FL-101	250 Hz 9 MHz IF CW filter	119.99
FL-103	2.8 KHz 9 MHz IF SSB filter	109.99
FL-222	1.9 KHz 455 KHz IF SSB filter	199.99
FL-223	1.9 KHz 9 MHz IF SSB filter	99.99
FL-232	350 Hz 9 MHz IF CW/RTTY filter	99.99
FL-257	3.3 KHz 455 KHz IF SSB filter	189.99
MB-5	Mobile mount	59.99
MB-23	Side mount carrying handle	15.99
OPC-478	PC to radio cable	45.99
RS-R75	PC control software w/RS-232 cable	80.99
SP-21	External speaker	119.99
UT-102	Voice synthesizer	74.99
UT-106	Plug-in DSP unit	149.99
R-8500	1M - 2G receiver/cell blocked	1499.99
R-8500-03*	1MHz - 2GHz receiver	1499.99
AH-7000	25-1000 MHz discone ant w/coax	179.99
CR-293	High stability xtal unit	329.99

Icom - continued

AES Price

FL-52A	500 Hz CW filter	189.99
MB-12	Mobile mount	59.99
MB-23	Side mount carrying handle	15.99
RS-R8500	PC control soft w/RS-232 cable	80.99
SP-7	Small external speaker	94.99
SP-21	External speaker	119.99
TV-R7100	TV/FM adapter; R-8500/R-7100	369.99
UT-102	Voice synthesizer	74.99
R-9000L*	1-1.999.8MHz Rcvr/LCD disp spec order	8299.99
SP-20	Speaker w/audio filter	249.99
*United States & state government agencies or a political subdivision thereof and communications utility companies and their legal agents ONLY may purchase unblocked models of R-1/R-2/R-3/R-10/PCR-100/PCR-1000/R-7000/R-8500 for official government or communications utility company use only. R-9000L may be purchased only by the United States government. Mail or FAX purchase order to AES. Exports: inquire.		
2m TRANSCEIVERS		
UT-101	DTMF unit for IC-2000H	\$ 28.99
IC-2100H	55w 2m FM Xcvr/TTP mic	179.99
BC-96	Microphone holder	43.99
CP-13L	Cig cable w/filter for BC-96	40.99
CS-2100	DOS cloning software	13.99
OPC-478	PC to radio cloning cable	45.99
CSW-2100	Win prog soft/cable; IC-2100H	50.99
HM-90A	Wireless microphone	129.99
EX-1759	Infrared receiver	99.99
EX-1513	Infrared Rcvr range extender	28.99
HS-62	Flexible mobile mic	49.99
MB-17A	Quick release bracket	49.99
OPC-347	23' DC power cable	46.99
OPC-440	Mic extension cable	85.99
OPC-441	Speaker extension cable	33.99
OPC-474	Radio to radio cloning cable	18.99
OPC-589	8-pin to jack adapter	35.99
OPC-647	8.2' mic extension cable	54.99
IC-207H	45w 2m/35w 440 FM Xcvr/TTP	299.99
BC-96	Microphone holder	43.99
CP-13L	Cig cable w/filter for BC-96	40.99
CS-207	DOS prog software; IC-207H	13.99
CSW-207/2710	Win cloning soft; 207/2710	30.99
OPC-646	Prog cbl; CS-207/CSW-207/2710	89.99
HM-90A	Wireless microphone	129.99
EX-1759	Infrared receiver	99.99
EX-1513	Infrared Rcvr range extender	28.99
MB-17A	Quick release bracket	49.99
MB-58	Remote controller bracket	39.99
OPC-347	23' DC power cable	46.99
OPC-440	Mic extension cable	85.99
OPC-441	Speaker extension cable	33.99
OPC-589	8-pin to jack adapter	35.99
OPC-600	11.5' separation kit	45.99
OPC-601	23' separation kit	60.99
OPC-647	8.2' mic extension cable	54.99
RMK-3	Package; MB-58/OPC-600/OPC-647	84.99
UT-89	Tone scan/decode unit; IC-2350H	89.99
CS-2710	DOS prog software; IC-2710H	4.99
UT-104	Tone squelch unit; IC-2710H	39.99
IC-2800H	50w 2m/35w 440 FM Xcvr/9600	539.99
CS-2800	Windows cloning software	13.99
OPC-478	PC to radio cloning cable	45.99
HM-90A	Wireless microphone	129.99
EX-1759	Infrared receiver	99.99
EX-1513	Infrared Rcvr range extender	28.99
MB-17A	Quick release bracket	49.99
MB-65	Mounting base platform	35.99
MB-73	Controller bracket	26.99
OPC-347	23' DC power cable	46.99
OPC-440	Mic extension cable	85.99
OPC-589	8-pin to jack adapter	35.99
OPC-647	8.2' mic extension cable	54.99
OPC-872	Controller extension cable	27.99



Icom - continued **AES Price**

SP-10	Slim-line external speaker	69.99
UT-49	DTMF decoder unit	74.99
FL-132	500 Hz main Rcvr CW filter; IC-821H	119.99
FL-133	500 Hz sub band Rcvr CW filter; IC-821H	119.99
MB-50	Rem controller bkt; Delta100H	4.99
OPC-333	23' sep kit; Delta100H	2.99
OPC-335	16.4' spkr cbl; Delta100H	4.99
UT-84	Tone squelch unit; IC-821H	99.99

Accessories for IC-2AT

BC-25U	Extra wall cgr; BP-3 only	\$ 29.99
BM-112U/BC-16U	Wall cgr; 5A/7/8 only	26.99
BP-3	250ma 8.4v battery	49.99
BP-4	Alkaline battery case	35.99
BP-5	425ma 10.8v high power battery	89.99
BP-5A	425ma 10.8v direct charge battery	89.99
BP-8	800ma 8.4v long life battery	99.99
CP-1	Cig cgr; BP-3/7/8/DC cord	26.99
CP-11	Cig cord w/noise filter	40.99
DC-1	DC operation module	40.99
HM-SS	Handheld shoulder strap	4.99

IC-T2H	6w 2m FM HT/8 AA nicads/cgr	139.99
AD-81	Adapter for BC-119-11	17.99
BC-110A/BC-74	Extra wall charger	40.99
BC-119-11	Desk charger (adapter required)	89.99
BC-133	Drop-in trickle charger	40.99
BP-194	AA alkaline battery case	18.99
BP-195	9.6v 700ma nicad battery	42.99
BP-196	9.6v 1050ma nicad battery	53.99
CP-12L	Rt angle cig charge cable w/filter	36.99
CS-T2	DOS prog software for IC-T2	13.99
OPC-474	Cloning cable (T2 to T2)	18.99
OPC-478	PC to radio cloning cbl; T2	45.99
CSW-HH4	Windows prog soft w/cable; T2	50.99
HM-46	Slim-line speaker/mic	45.99
HM-54	Hvy duty spkr/mic	83.99
HM-75A	Remote control microphone	70.99
HS-51	Headset w/VOX	96.99
LC-145	Carrying case for IC-T2	38.99
OPC-254L	Right angle mini DC chg cable	14.99
SP-13	Earphone	4.99
LC-123	Vinyl case; Z1A; BP170/71/72	4.99
UT-93	Tone squelch; early IC-Z1A	2.99

IC-T22A	3w 2m FM HT/batt/cgr/TTP	249.99
IC-T7H	6w 2m/440 HT/batt/cgr/TTP	199.99
IC-W32A	5w 2m/440 FM HT/batt/cgr/TTP	269.99
AD-51	Batt pack adapter; W32A	14.99
AD-56	Batt pack adapter; T22A/T7	18.99
BC-119-11	Desk charger (adapter required)	89.99
BP-170	Battery case	35.99
BP-171	4.8v 700ma battery	49.99
BP-172	4.8v 950ma battery	91.99
BP-173	9.6v 600ma battery	139.99
BP-180	7.2v 600ma battery	83.99
CP-12	Cig lighter cable w/filter	36.99
CP-12L	Right angle cig cable w/filter	36.99
CS-T7	DOS prog software for IC-T7	2.99
CSW-32	DOS prog software for IC-W32A	13.99
OPC-474	Cloning cbl (IC-32A to IC-32A)	18.99
OPC-478	PC to radio cloning cbl; T7/W32A	45.99
CSW-HH4	Windows prog soft/cbl; W32A/T7	50.99
FA-1443B	Extra 2m/440 dual band flex ant	29.99
HM-46	Slim-line speaker/mic	45.99
HM-46L	Slim-line spkr/mic, rt angle plug	45.99
HM-54	Heavy duty spkr/mic	83.99
HM-75A	Remote control microphone	70.99
HS-10	Boom mic/headset	69.99
HS-10SA	VOX unit	69.99
HS-10SB	PTT switchbox	69.99
HS-85	Headset w/VOX	89.99
LC-125	Vinyl case; T22A w/BP170/171/172	19.99
LC-126	Vinyl case; T22A w/BP173	38.99
LC-128	Vinyl case; IC-W32A	38.99
LC-136	Vinyl case; T7 w/BP170/171/172	38.99

Icom - continued **AES Price**

LC-137	Vinyl case; T7 w/BP173/180	38.99
MB-30	Mobile/wall bracket	41.99
NCP-1	Nylon chest pack	39.99
OPC-254	Mini DC power cable	14.99
OPC-254L	Right angle mini DC pwr cable	14.99
SP-13	Earphone	4.99
UT-94	Tone squelch unit; T22A	55.99
IC-Q7ABC	350mw 2m/440 HT/batts/cgr	134.99
AD-92SMA	SMA-BNC adapter	16.99
BC-127A	Extra nicad charger	20.99
HM-46	Slim-line speaker/mic	45.99
HS-85	Headset w/VOX	89.99
SP-13	Earphone	4.99
OPC-782	Plug adapt cbl; HM46/HS85/SP13	16.99
LC-146	Carrying case	38.99
IC-T81A	5w 6m/2m/440/1w 12 HT/batt/cgr/TTP	299.99
AD-87	Batt pack adapter for rapid charger	8.99
AD-88	PCB board; orig BC-119-11	29.99
AD-92SMA	SMA-BNC adapter	16.99
BC-119-31	Desk charger (adapter required)	99.99
BP-197	3 AA battery case	24.99
BP-198	4.8v 700ma NiMH battery	59.99
BP-199	6v 700ma NiMH battery	70.99
BP-200	9.6v 680ma NiMH battery	85.99
CP-12	Cig lighter cable w/filter	36.99
CP-12L	Right angle cig cable w/filter	36.99
CS-T8K	DOS prog soft w/cable; IC-T8A/HP D	29.99
CS-T81	Windows cloning software; IC-T81A	13.99
OPC-474	Cloning cable (radio to radio)	18.99
OPC-478	PC to radio cloning cable	45.99
HM-46	Slim-line speaker/mic	45.99
HM-54	Heavy duty spkr/mic	83.99
HM-75A	Remote control microphone	70.99
HS-51	Headset w/VOX	96.99
HS-85	Headset w/VOX	89.99
LC-147	Carrying case; IC-T8A/HP	19.99
LC-148	Carrying case; IC-T81A	24.99
OPC-254	Mini DC power cable	14.99
OPC-254L	Right angle mini DC pwr cable	14.99
SP-13	Earphone	4.99
BP-131	900ma 7.2v batt/mic; W21AT	49.99

Accessories for IC-2SAT/2SRA/24AT/W2A

AH-20	Replacement rcv ant; IC-2SRA	\$ 28.99
BA-12	Drop-in charger adapter	19.99
BP-82	7.2v 300ma battery	49.99
BP-83	7.2v 600ma battery	79.99
BP-84	7.2v 1000ma battery	99.99
BP-90	AA alkaline battery case	35.99
MB-22	Alligator belt/pocket clip	4.99
IC-2GXAT/HP	7w 2m HT/batt/cgr/TTP	249.99
AD-25	Battery charger adapter	49.99
AD-28	Batt pack adapter for rapid charger	18.99
BC-105A/BC-77	Extra wall charger	40.99
BC-119-11	Desk charger (adapter required)	89.99
BP-130A	Battery case	35.99
BP-157A	900ma 7.2v battery	85.99
BP-174	600ma 12v battery	98.99
CP-13	Cig cable w/filter	40.99
CP-13L	Right angle cig cable w/filter	40.99
HM-46	Slim-line speaker/mic	45.99
HM-46L	Slim-line spkr/mic, rt angle plug	45.99
HM-54	Heavy duty spkr/mic	83.99
HS-51	Headset w/VOX	96.99
LC-116	Carrying case; BP-130A/157A/160	38.99
LC-117	Carrying case for BP-132A	19.99
MB-30	Mobile/wall bracket	41.99
OPC-288	Mini DC power cable	19.99
SP-13	Earphone	4.99
UT-49	DTMF decoder unit	74.99
AD-22	External batt chg adapt; D1A	19.99
AD-27	Batt pack adapt; rapid cgr; D1A	4.99
AD-44	Batt adapt; rapid cgr; T21A	1.99
LC-109	Vinyl case; BP151/159; T21A	6.99

Icom - continued **AES Price**

LC-110	Vinyl case; BP-153; ICT21A	D 1.99
LC-111	Vinyl case; BP-152; IC-T21A	D 9.99

ACCESSORIES

AG-25	2m mast mounted GaSFET preamp	\$189.99
AG-35	430 MHz mast mounted preamp	199.99
AG-1200	1.2 GHz mast mt preamp	D 159.99
CT-16	Satellite interface unit	D 119.99
CT-17	CI-V level converter	139.99
HM-12	Scan hand microphone	74.99
HM-14	Scan/TTP microphone	D 99.99
MB-23	Side mount carrying handle	15.99
OPC-137	Adapter cable; older Icom Xcvr	D 19.99
PS-85	Power supply	299.99
SM-6	Electret desk microphone	119.99
SM-8	2-connector desk mic w/up/down scan	169.99
SM-20	Deluxe desk microphone	219.99
SP-5	Mobile speaker	54.99
SP-7	Small external speaker	94.99
SP-10	Slim-line external speaker	69.99
SP-20	Speaker w/audio filter	249.99
SP-21	External speaker	119.99

CONSUMER ELECTRONICS

A-22	5w PEP compact Navicom air handheld	\$499.99
IC-M3A	5w VHF marine handheld w/AA nicads	159.99
IC-M45W	White 25w VHF marine Xcvr	D 149.99
IC-M45AW	White 25w VHF marine Xcvr	179.99
M-710 (21)	150w HF marine SSB .spec order	1399.99
M-710-05 (22)	150w 1.6-27.5 SSB .spec order	1599.99
M-710RT-21	150w HF marine SSB spec order	1699.99
M-710RT-22	150w 1.6-27.5 SSB .spec order	1899.99
AT-130	HF marine auto ant tuner spec order	449.99
IC-4008A	Family radio service black handheld	79.99
BC-127A	Charger for 2 or 4 AA nicads	20.99
BP-202	Nicad battery assembly	17.99
HM-46	Slim-line speaker/mic	45.99
HS-85	Headset w/VOX	89.99

IDIOM PRESS (IDI)

K-3	Logikey CW keyer	\$119.99
HK-3	Hook-up kit	10.99

INTERFLEX (INT)

dspGOLD	Software for AEA DSP-2232	D \$ 39.99
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International Ant (IAC)

160m	double Bazooka 248' antenna	\$214.99
80m	double Bazooka 121' antenna	150.99
40m	double Bazooka 64' antenna	126.99
160m-S	160m half sloper 127' antenna	140.99
80m-S	80m half sloper 67' antenna	115.99
40m-S	40m half sloper 33' antenna	105.99

ISOTRON (ISO)

160C	160m 9.5' x 16" x 15" 100 KHz bandwidth ant	\$169.99
80	80m 32" x 16" x 15" 110 KHz bandwidth ant	95.99
40	40m 22" x 16" x 15" 250 KHz bandwidth ant	85.99
20	20m 21" x 8" x 4" 350 KHz bandwidth ant	74.99
15	15m 21" x 1.5" x 4" 450 KHz bandwidth ant	64.99
10	10m 16" x 1.5" x 4" 1 MHz bandwidth ant	64.99
6	6m 16.5" x 2" x 4" 1.25 MHz bandwidth ant	69.99

80/40 Combo*	80/40m 32" x 16" x 30" ant	168.99
20/15/10 Combo	20/15/20m combo ant	187.99

*Requires coaxial "T's" & jumpers - not included

JPS (JPS)

NRF-7	Noise reducer and filter unit	D \$129.99
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JSC (JSC)

JRR-520	5-wire rotor cable	D, per ft. \$.14
JRR-520		D, 100 ft. Roll 12.99
JRR-520		D, 500 ft. Roll 44.99
JRR-520		D, 1000 ft. Roll 79.99

K-COM (KCO)

RF-1	Modular telephone 3-30 MHz RFI filter	\$ 16.99
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K-Com - continued AES Price

RF-1/Low	Modular phone 5-3 MHz RFI filter	16.99
RF-1/2-line	2-line modular 3-30 MHz RFI filter	22.99
RF-1/coiled	Coiled cord modular 3-30MHz filter	22.99
RF-2	Hard-wired telephone 3-30 MHz RFI filter	10.99

KC Tracker (See GRACE) KACHINA (KAC)

505-DSP/505-AT2	PC HF Xcvt/tuner installed	1899.99
505-MB	Mobile mount bracket	19.99
505-SM	Rubber shock mts; 505-MB	9.99
970055	25' control head cable	29.99
970056	75' control head cable	59.99
970057	25' RS-232 cable	9.99
970058	75' RS-232 cable	19.99

KANTRONICS (KAN)

Data Engine	TNC w/no modems	\$129.99
Data Engine	w/DE-1200 modem	189.99
KPC-3 Plus/128K	Small packet TNC/128K RAM	179.99
KPC-3 Plus	User's Guide (comes w/KPC3+)	9.99
KPC-9612 Plus/128K	9600 controller/128K	369.99
128K	128K memory upgrade; KPC-3/9612	24.99
KAM 98	Single port multi-mode dig controller	399.99
12VDC Adaptor	300ma adapt; KAM 98/KPC3	12.99
Host Master II+	IBM software	89.99
Log Windows	CSS Software	59.99
Package 3	Upgrade; KAM Plus	39.99
Pacterm 98	CSS Software; Kan TNCs	79.99
Superfax II	WX FAX program for IBM	59.99
APRS adapter cable;	GPS to Kantronics TNC	32.99
G-TOR Book		4.99

KENWOOD (KEN)

TS-950SDX	Dlx Xcvt w/keyer/DSP/filters	3999.99
DRU-2	Digital recording unit	139.99
MC-43S	Extra 8-pin hand mic w/up-down	59.99
MC-60A	8-pin amp desk mic w/up-down	149.99
MC-80	8-pin electret desk mic w/up-down	109.99
MC-90	2-head DSP desk microphone	239.99
PS-950	External spkr w/audio filters	149.99
VS-2	Voice synthesizer	69.99
YK-88CN-1	270 Hz CW filter (1st IF)	129.99
YK-88SN-1	1.8 KHz SSB filter (1st IF)	129.99
TS-870S	9-band Xcvt/Rcvr/AFDSP/tuner	2099.99
PS-40	Switching power supply	199.99
PS-52	Heavy duty power supply	269.99
DRU-3A	Dig recording unit; TS-870/570	129.99
MC-43S	Extra 8-pin hand mic w/up-down	59.99
MC-60A	8-pin amp desk mic w/up-down	149.99
MC-80	8-pin electret desk mic w/up-down	109.99
MC-90	2-head DSP desk microphone	239.99
SO-2	TCXO unit	179.99
SP-31	External speaker	99.99
VS-2	Voice synthesizer	69.99
TS-570D(G)	9-band Xcvt/Rcvr/AFDSP/tuner/mic	1099.99
TS-570S(G)	9-band Xcvt/Rcvr/AFDSP/tune/mic	1299.99
PS-40	Switching power supply	199.99
PS-53	Heavy duty 22.5A power supply	249.99
DRU-3A	Dig recording unit; TS-570/870	129.99
MB-430	Mobile mounting bracket	49.99
MC-43S	8-pin hand mic w/up-down	59.99
MC-60A	8-pin amp desk mic w/up-down	149.99
MC-80	8-pin electret desk mic w/up-down	109.99
MC-90	2-head DSP desk microphone	239.99
PG-22	Heavy duty DC cable	37.99
SO-2	TCXO unit	179.99
SP-23	External speaker	89.99
VS-3	Voice synthesizer	39.99
YK-88C-1	500 Hz CW filter	129.99
YK-88CN-1	270 Hz CW filter	129.99
YK-88SN-1	1.8 KHz SSB filter	129.99
TS-50S	Compact HF Xcvt/SW Rcvr/mic/mt	699.99
PS-40	Switching power supply	199.99
PS-53	Heavy duty 22.5A power supply	249.99

Kenwood - continued AES Price

AT-50	External HF auto tuner	329.99
PG-4M	18' extension cable for AT-50	29.99
IF-10D	Computer interface	89.99
MB-13	Deluxe quick release mobile mt	55.99
MC-47	Extra multi-func 8-pin hand mic	59.99
MC-60A	8-pin amp desk mic w/up-down	149.99
MC-80	8-pin electret desk mic w/up-down	109.99
PG-2Y	DC cable	39.99
SO-2	TCXO unit	179.99
SP-23	External speaker	89.99
TC-50/50Case	Travel case for TS-50S/60S	89.99
YK-107C	500 Hz CW filter	129.99
7-pin DIN plug		4.99
8-pin DIN plug		6.99
13-pin DIN plug		9.99
E30-1765-08	Adapt cord; MC85 - 8-pin Xcvt	19.99
HS-5	Deluxe headphones	79.99
HS-6	Lightweight headphones	59.99
LF-30A	1kw PEP low pass filter	64.99
MC-43S	8-pin hand mic w/up-down switch	59.99
MC-60A	8-pin amp desk mic w/up-down	149.99
MC-80	8-pin electret desk mic w/up-down	109.99
PG-3B	15A DC line noise filter	29.99
SP-50B	High quality external mobile speaker	55.99
TSU-5	Prog CTCSS decoder; TS-790A	64.99
TU-7	Prog encoder; 2550/751A/TW-4100A	54.99
TU-8	CTCSS tone unit; TS-450S/690S	54.99
UT-10	10w 1.2 GHz module; TS-790A	549.99
YG-455C-1	500 Hz CW filter; TS-450/690	149.99
YK-88S-1	2.4 KHz SSB filter; TS-450/690	69.99
TM-642AD	50w 2m/25w 220FM/backlit TTP mic	739.99
TM-742AD	50w 2m/35w 440 FM/backlit TTP	639.99
DFK-3	9' separate display cable kit	26.99
DFK-4	13' remote cable kit	59.99
DFK-7	Deluxe 22' remote cable kit	89.99
MB-14	Quick release mobile mount	19.99
MJ-88	Modular to 8-pin mic adapter	30.99
MJ-89	Modular mic switch	69.99
TSU-7	CTCSS decoder unit	59.99
UT-50S	50w 6m unit	329.99
UT-220S	25w 220 MHz unit	329.99
UT-440S	35w 440 MHz unit	299.99
UT-1200	10w 1.2 GHz unit	399.99
DFK-4B	13' rem cable kit; TM-733A	29.99
DFK-7B	Dlx 22' rem cbl kit; TM-733A	49.99
TM-D700A	50w 2m/35w 440 FM/1200/9600	599.99
MJ-88	Modular to 8-pin mic adapter	30.99
MJ-89	Modular mic switch	69.99
PG-4X	13' extension cable kit	69.99
PG-5A	Packet data cable	15.99
VS-3	Voice synthesizer	39.99
TM-G707A	50w 2m/35w 440 FM/TTP mic	329.99
TM-V7A	50w 2m/35w 440 FM Xcvt/TTP mic	439.99
DFK-3C	9' separate display cable kit	44.99
DFK-4C	13' remote cable kit	64.99
DFK-7C	Deluxe 23' remote cable kit	99.99
MJ-88	Modular to 8-pin mic adapter	30.99
MJ-89	Modular mic switch	69.99
PG-4S	PC interface cable	32.99
PG-5A	Packet data cable	15.99
VS-3	Voice synthesizer	39.99
TM-331A	25w 220 FM Xcvt w/TTP mic	499.99
KQT-8/TSU-6	Prog CTCSS decoder	49.99
TM-541A	10w 1.2 GHz FM Xcvt/TTP/encoder	449.99
DTU-2	Digital paging unit	14.99
KQT-8/TSU-6	Prog CTCSS decoder	49.99
TM-261A	50w 2m FM Xcvt w/TTP mic	179.99
TM-461A	35w 440 FM Xcvt w/TTP mic	439.99
TSU-8	CTCSS decoder	59.99
MC-52DM	Back-lit TTP mic; 241/331/441/541	79.99
MC-53DM	Back-lit TTP mic; 251/733/742/255/7A	79.99
Accessory for TH-75A/77A/25AT/26AT		
PG-3E	Cig cord w/filter for DC-1	\$19.99

Kenwood - continued AES Price

Accessories for TH-28A/48A/78A		
BC-15A	Rapid cgr; PB-13/14/17/18	\$19.99
ME-1	Memory expansion; also for TM-251A	4.99
SC-34	Soft case; TH-28A/48A/PB-17/18	4.99
SC-36	Large soft case; TH-78A	.99
TH-22ATH	5w 2m FM HT/batt/KSC-8A/TTP	229.99
TH-42AT	2.5w 440 FM HT/batt/cgr/TTP	229.99
TH-79AKSS	5w 2m/440 HT/batt/cgr/TTP	379.99
BT-9	4-AA battery holder	29.99
EMC-3	Lapel clip mic/ear piece	29.99
HMC-3	VOX/boom mic headset	59.99
KSC-8A	Drop-in cgr; 25/26/75/77/22/42/79	26.99
KSC-14	2-pack rapid charger	87.99
PB-33	1200ma 6v battery	89.99
PB-34	600ma 9.6v (5w) battery	89.99
PG-2W	DC cable w/fuse	17.99
PG-3J	Cig lighter cord w/filter	36.99
SC-41	Soft case; TH-79A(D) w/PB-32	4.99
SC-43	Soft case; TH-79A(D) w/PB-33/34	4.99
SMC-32	Mini water resist rt angle spkr/mic	52.99
SMC-33	Speaker/mic w/remote control	65.99
SMC-34	Spkr/mic w/vol cont/function keys	39.99
TSU-8	CTCSS decoder; TH-22/42AT	59.99
WR-2	Water resistant bag; TH-22/42AT	29.99
TH-G71A	5w 2m/440 FM HT/batt/cgr/TTP	269.99
TH-D7A(G)	5w 2m/440 FM HT/1200/9600 TNC	399.99
BC-19	Rapid charger	64.99
BT-11	4-AA battery holder	17.99
EMC-3	Lapel clip mic/ear piece	29.99
HMC-3	VOX/boom mic headset	59.99
J29-0631-13	Belt clip for batt; D7A/G71A	4.99
PB-38	650ma 6v battery	44.99
PB-39	600ma 9.6v (5w) battery	57.99
PG-2W	DC cable w/fuse	17.99
PG-3J	Cig lighter cord w/filter	36.99
PG-4P	Computer control cable; TH-G71A	32.99
PG-4V	VC-H1 connection cable TH-D7A	49.99
PG-4W	PC software/cable; TH-D7A only	55.99
SC-45	Soft case for TH-G71A/PB-38/39	15.99
SC-47B	Black soft case for TH-D7A	15.99
SC-470R	Orange soft case for TH-D7A	15.99
SMC-32	Mini water resist rt angle spkr/mic	52.99
SMC-33	Speaker/mic w/remote control	65.99
SMC-34	Spkr/mic w/vol cont/function keys	39.99
WR-2	Water resistant bag; TH-G71A	29.99
BT-10	6 AA alk batt case; TH-235A	2.99
PB-36	7.2v 950ma nicad batt; TH-235A	9.99
PB-37	12v 950ma (5w) nicad; TH-235A	9.99
EZ-PASS WIN 95	No-code tech study package	19.99
VC-H1	Visual Communicator SSTV unit	309.99
E30-3352-08	16-pin DIN/unterminated cbl	44.99
E59-0407-08	16-pin DIN plug only	29.99
KCT-24S	VCH-1 to PC software/cable	58.99
PG-4T	VC-H1 to Kenwood FM mobile cable	49.99
SC-46P	Protective case	18.99
VC-IS	Software w/cable for VC-H1 to PC	29.99
EK-AMA1	Portable emergency kit special order	5399.99
CONSUMER ELECTRONICS		
TKM-707	150w HF marine SSB Xcvt spec order	1249.99
KAT-1	HF marine auto ant tuner spec order	569.99
UBZ-LH14BK	Fam radio svc black handheld	89.99
EMC-3	Lapel clip mic/ear piece	29.99
HMC-3	VOX/boom mic headset	59.99
SMC-34	Spkr/mic/vol cont/function keys	39.99
UBC-3	Nicad desk charger	36.99
UPB-2	Nicad battery pack	24.99
USC-4B	Black nylon case; UBZ-LF14	9.99
USC-5B	Black nylon case; UBZ-LH14BK	15.99
UBZ-AL14BK	Family radio svc black handheld	49.99
KOSS (KOS)		
GT/3	Stereophone w/covered headband	\$6.99
HD/33	Computer stereophone/vol control	4.99



Koss - continued**AES Price**

HP/6	Port stereohead w/vol/adj headband ..	9.99
KTX/2	Portable stereohead w/vol/adj headband ..	9.99
KTX/4	Collapsible stereohead w/vol control ..	14.99
QZ/99	Noise reduction stereohead w/mono sw ..	59.99
QZ/2000	Active noise reduction stereohead ..	179.99
SB/30	Communications headset w/mic ..	49.99
SP/5	Sideline yellow stereohead ..	7.99
SW/5	Single communications headset ..	14.99

LAKEVIEW (LAK)

9175	75m 7' Hamstick antenna ..	\$ 24.99
9140	40m 7' Hamstick antenna ..	24.99
9130	30m 7' Hamstick antenna ..	24.99
9120	20m 7' Hamstick antenna ..	24.99
9117	17m 7' Hamstick antenna ..	24.99
9115	15m 7' Hamstick antenna ..	24.99
9112	12m 7' Hamstick antenna ..	24.99
9110	10m 7' Hamstick antenna ..	24.99
9106	6m 4.5' Hamstick antenna ..	24.99
901	Dipole mount for 2 Hamsticks ..	13.99
IM-1	Inducti-match for 75-12m mobile ant ..	12.99

LARSEN (LAR)**27-31 MHz ANTENNA**

NMO-27B	10m black ant only (no mount)	\$ 36.99
NMO-27C	10m ant only (no mount) ..	33.99

47-54 MHz ANTENNA

NMO-50B	6m black ant only (no mount) ..	\$ 36.99
NMO-50C	6m ant only (no mount) ..	33.99

144-174 MHz ANTENNAS

NMO-150B	2m black ant only (no mt), 3 db ..	\$ 33.99
NMO-150C	2m ant only (no mount), 3 db ..	30.99

220-265 MHz ANTENNAS

NMO-220B	220 black ant only (no mt), 3 db ..	\$ 36.99
NMO-220C	220 ant only (no mount), 3 db ..	30.99

440-460 MHz ANTENNAS

NMO-440B	440 black ant only (no mt), 5 db ..	\$ 35.99
NMO-440C	440 ant only (no mount), 5 db ..	29.99

MM-2/70	2m/440 1/4 wave/2db mag mt ant ..	46.99
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NMO-2/70B	2m/440 blk ant only (no mt), 2/4db ..	60.99
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NMO-2/70C	2m/440 ant (no mount), 2/4db ..	56.99
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NMO-2/70-SH	2m/440 ant (no mt), 1/4 wv/2db ..	36.99
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NMO-012	135-160/148-173 2.5db (no mt) ..	D 19.99
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NMOQ-Spec	136-512 MHz 1/4 wave ant (no mt) ..	11.99
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NMOQ-Spec-B	136-512 black 1/4 wv ant (no mt) ..	15.99
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NMOQ-Spec-K	136-512MHz 1/4 wv 3/4" hole ant ..	27.99
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NMOQ-2/70-B	2m/440 1/4 wv cell look ant (no mt) ..	34.99
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NMO-1290B	1.2 GHz black ant only (no mt) D ..	19.99
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ON GLASS ANTENNAS

KG-144-UD-PL	2m 3 db on glass antenna ..	\$ 76.99
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KG-220-UD-PL	220 3 db on glass antenna ..	76.99
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KG-440-UD-PL	440 2.4 db on glass antenna ..	70.99
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KG-2/70-CX-PL	2m/440 2.5/4.5db on glass ..	106.99
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KG-Reinstall	Reinstall kit for KG-ants ..	6.99
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KULDUCKIES - For Hand-helds

KD4-146	2m BNC Kulduckie ..	\$ 19.99
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KD4-2/70	2m/440 BNC Kulduckie ..	31.99
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KD4-222	220 BNC Kulduckie ..	19.99
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KD14-445	440 1/4 wave BNC Kulduckie ..	18.99
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KD4-146-HQ	2m part helical, part 1/4 wave BNC ..	24.99
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KD14-2M-HW	2m 1/2 wave BNC antenna ..	37.99
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KD14-440-HW	440 1/2 wave BNC antenna ..	37.99
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ACCESSORIES

BSA-K	Base mounting kit for mobile ant ..	\$ 50.99
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NMO-B38	NMO mt hdw/A-7 NLA adapter ..	13.99
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NMO-CAP-B	Black rain cap for NMO mount ..	4.99
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NMO-K	3/4" hole mt w/coax for NMO ant ..	15.99
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NMO-MM	Magnet mt, coax for NMO ant ..	31.99
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NMO-TLP	Low profile tnk lid mt, coax; NMO ant ..	29.99
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PO-K	Roof mt, coax for SO-239 ant ..	27.99
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PO-MM	Magnet mt, coax for SO-239 ant ..	34.99
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PO-TLM	Trunk lip mt, coax for SO-239 ant ..	28.99
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Larsen - continued**AES Price**

RG-SS	Extra super seal NMO gaskets (3)	3.99
SPRING	Shock spring	10.99
TMB-34	Trunk mtg bkt for NMO antenna ..	5.99
TMB-34B	Black trunk mtg bkt for NMO ant ..	7.99
W-2/70B	2m/440 black replacement whip ..	26.99
W-490	49" replacement whip ..	9.99
W-490B	Black 49" replacement whip ..	12.99

LOGSAT (LOG)

Logsat Professional	Satellite tracking CDROM ..	\$ 69.99
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M² (MSQ)

KT-36XA	20/15/10m 6el 32' boom beam	1249.99
40M-1LDX	6.9-10 MHz rotatable dipole	419.99
20M-4DX	20m 7.4db 4el 34' boom beam	529.99
17M-5DX	17m 8.6db 5el 36' boom beam	529.99
17M-3DX	17m 6.3db 3el 18' boom beam	399.99
15M-4DX	15m 8.5db 4el 33' 8" boom beam ..	449.99
12M-4DX	12m 8.6db 4el 27' boom beam	399.99
10M-4DX	10m 8.7db 4el 23' boom beam	399.99
6M-3	6m 50-50.6 or 51-54 6.4db 3el 6' 9" bm beam	125.99
6M-5X Upgrade Kit	6M-5 to 6M-5X ..	60.99
6M-5X	6m 50-50.5 or 51-54 9.4db 5el 18' bm beam	209.99
6M-7JHV	6m 50-50.4 10.9db 7el 30' 8"bm beam	261.99
6M-2WLC	6m 49.7-50.5 11.9db 9el 39' 6" boom T*	461.99
6M-9KHW	6m 50-50.4 12.7db 9el 49' 4" bm beam	499.99
6M-11JKV	6m 50-50.4 14db 11el 69'bm beam T*	749.99
6M-HO-LOOP	6m 50-50.3 4.4db horiz loop ant ..	94.99
6" x 1/2"	3/8-24 mobile mast for loop	8.99
16" x 1/2"	3/8-24 mobile mast for loop	10.99
18" x 5/8"	3/8-24 mobile mast for loop	14.99
36" x 1/2"	3/8-24 mobile mast for loop	23.99
50" x 1/2"	3/8-24 mobile mast for loop	25.99
MAST BKT KIT	For 6M-HO-LOOP ..	15.99
2M-4	2m 7.5db 4el 4' boom beam ..	94.99
2M-7	2m 10.3db 7el 8'10" boom beam ..	115.99
2M-9FM	2m 145-148 12db 9el 14' 6" bm beam	125.99
2M-9SSB	2m 144-146 12db 9el 14' 6" bm beam	125.99
2M-12	2m 12.8db 12el 19'6" boom beam ..	167.99
2M-5WL	2m 14.8db 17el 33' boom beam ..	209.99
2M-18XXX	2m 144-146 15.3db 18el 36'3" bm beam	240.99
2M-8WLDH	2m 144-144.7 17db 21el 55' bm beam	555.99
2M-CP14	2m 10.3db 7h/7v 10'6"bm circ beam	177.99
2M-CP22	2m 12.5db 11h/11v 18'6"bm circ beam	240.99
Circ Switch	RHC/LHC switch; circ pol beam	146.99
FG X-Boom Kit	For circular antennas, etc.	135.99
2M-XP20	144-146 13.3db 10h/10v 21.5' bm cross pol	209.99
2M-XP28	144-146 15.1db 14h/14v 34.5'bm cross pol	289.99
2M5-440XP	2m/440 9/12db 5/10el 5'8" bm beam	167.99
2M-HO-LOOP	2m 144-144.5 4.8db horiz loop ..	43.99
6" x 1/2"	3/8-24 mobile mast for loop	8.99
16" x 1/2"	3/8-24 mobile mast for loop	10.99
18" x 5/8"	3/8-24 mobile mast for loop	14.99
36" x 1/2"	3/8-24 mobile mast for loop	23.99
50" x 1/2"	3/8-24 mobile mast for loop	25.99
Big-Foot	4x-mag mt; 2M-HO-LOOP stack/etc ..	99.99
MAG-KIT	Magnet mt kit; single 2m-HO-LOOP ..	20.99
MAST BKT KIT	For 2M-HO-LOOP ..	15.99
STACK-KIT	Stack kit for 2 2m-HO-LOOP's ..	61.99
TOP BKT KIT	For 2M-HO-LOOP ..	20.99
EB-14K	2m Eggbeater omni/hor/rhc overhead ..	136.99
RR-22	2m 6db overhead reflector kit/base mt	39.99
222-7EZ	220 9.8db 7el 5' 8" boom beam	94.99
222-10EZ	220 12db 10el 9' 9" boom beam ..	104.99
222-5WL	220 15.2db 15el 23'3" boom beam ..	167.99
222-7WL	220 16.4db 23el 32'5" boom beam ..	209.99
222-HO-LOOP	220-224 4.75db horiz loop ant ..	43.99
6" x 1/2"	3/8-24 mobile mast for loop	8.99
16" x 1/2"	3/8-24 mobile mast for loop	10.99
18" x 5/8"	3/8-24 mobile mast for loop	14.99
36" x 1/2"	3/8-24 mobile mast for loop	23.99
50" x 1/2"	3/8-24 mobile mast for loop	25.99
MAG-KIT	Magnet mt kit; single 222-HO-LOOP ..	20.99
222-XP30	220 15.2db 15h/15v 24'3"bm cross pol	289.99
440-470-5W	440-470 7.8db 5el 2'2"bm beam	136.99

M² - continued**AES Price**

420-50-11	432 11.3db 11el 5' bm rear mt beam	94.99
440-18	432 14.5db 18el 11'4" boom beam ..	125.99
440-21ATV	432 15.9db 21el 14'6" bm ATV beam	146.99
432-9WL	432 17.3db 28el 21' boom beam ...	177.99
432-13WLA	432 18.6db 38el 30'8" bm beam	240.99
436-CP30	432 14.5db 15h/15v 9'9"bm circ beam	240.99
436-CP42UG	432 16.8db 21h/21v 18'10"bm circ	282.99
Circ Switch	RHC/LHC switch; circ pol beam	146.99
FG X-Boom Kit	For circular antennas, etc.	135.99
432-HO-LOOP	430-436 5db horiz loop ant ..	43.99
6" x 1/2"	3/8-24 mobile mast for loop	8.99
16" x 1/2"	3/8-24 mobile mast for loop	10.99
18" x 5/8"	3/8-24 mobile mast for loop	14.99
36" x 1/2"	3/8-24 mobile mast for loop	23.99
50" x 1/2"	3/8-24 mobile mast for loop	25.99
Big-Foot	4x-mag mt; 432-HO-LOOP stack/etc ..	99.99
MAG-KIT	Mag mt kit; single 432-HO-LOOP ..	20.99
STACK-KIT-70CM	Stack kit; 2 432-HO-LOOP's ..	61.99
TOP BKT KIT	For 432-HO-LOOP ..	20.99
EB-432	432 Eggbeater omni/hor/rhc overhead	125.99
RR-70CM	432 6db overhead reflector kit/base mt	39.99
902-6W	900MHz 10db 6el 2' boom beam	62.99
902-10EZ	900MHz 12.6db 10el 3'5"bm beam	94.99
902-14WLA	900MHz 18.8db 40el 15'4" bm beam	209.99
902-18EZ	900MHz 14.8db 18el 5'4"bm beam	136.99
23CM-22EZ	1.2GHz 16db 22el 5'2" bm beam D ..	94.99
23CM-22EZA	1.2GHz 16db 22el 5'2" bm beam	125.99
23CM-35	1.2GHz 18.4db 35el 10' bm beam ..	156.99
2M-2-Port-PD	2m 2-port type N power divider ..	59.99
70CM-2-Port-PD	432 2-port N power divider ..	59.99
23CM-2-Port-PD	1.2GHz 2-port N power divider ..	59.99
FAST MAST	20' extended portable alum mast	167.99
OR-2800PDC	35 sq ft azimuth rotor w/control box	1429.99
RR-2800PP	Control box; prop pitch spec order	499.99

*These items are drop-shipped (shipped direct to you from the M² factory). On these factory drop-shipments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Fresno, California via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order items.

MFJ ANTENNA TUNERS (MFJ)

989C	Dlx 3kw PEP w/roller inductor	\$319.99
986	3kw PEP w/roller inductor	299.99
962D	1.5kw PEP/meter/switch/balun/roller ind	249.99
969	HF & 6m 300w roller inductor tuner	189.99
949E	300w/meter/dummy/sw/balun	139.99
1312C	12vdc 300ma ps 2.5mm coaxial; 949E ..	14.99
948	300w/meter/switch/balun	119.99
941E	300w tuner w/meter, switch, balun	109.99
945E	300w tuner w/meter plus 6m	99.99
20	Mobile bracket for 945E ..	4.99
901B	Versa Tuner 200w ant tuner	79.99
910	80-10m mobile antenna matcher	19.99
16010	200w random wire tuner ..	49.99
903	6m antenna tuner ..	49.99
906	6m antenna tuner w/wattmeter	79.99
914	Auto tuner extender ..	59.99
921	2m/220 300w PEP tuner/SWR/wattmeter ..	69.99
922	2m/440 150w tuner/SWR/wattmeter	79.99
924	440MHz 300w PEP tuner/SWR/wattmeter ..	69.99
934	300w tuner w/artificial ground	169.99
940A	10m antenna tuner/SWR/wattmeter	79.99

MEMORY KEYS

451	Dedicated CW keyboard w/memory	\$ 99.99
451X	Morse keyboard interface only	69.99
452	CW keyboard/keyer w/disp/keyboard	129.99
452X	CW keyboard/keyer w/disp, no keyboard ..	99.99
498	Dlx CW keyboard/keyer w/disp/keyboard ..	179.99
498X	Dlx CW keyboard w/disp, no keyboard Δ ..	129.99



MFJ - continued**AES Price**

490	492 keyer/Bencher paddle combo	184.99
490X	492 keyer for use w/Bencher or 564	99.99
564	Deluxe iambic paddle for 490X	49.99
492	192 char menu driven memory keyer	89.99
80	8000 char memory expansion for 492 Δ	14.99
492X	Memory keyer w/8000 char expansion Δ	99.99
78	Remote control for 492/492X	19.99
493	32K char menu driven mem-keyer	129.99
79	Remote control for 493	29.99
551	IBM AT-101 keyboard for 493	39.99
5409	9-pin serial port 6' cable for 493	12.99
5425	25-pin serial port 6' cable for 493 ...	12.99

ELECTRONIC KEYERS

407D	Deluxe electronic keyer	\$ 69.99
401D	Econo keyer	49.99

KEYER/PADDLES

422D	Keyer/Bencher paddle combination	\$154.99
422DX	Keyer only	79.99
441	SlimLine econo keyer	59.99
442	SlimLine keyer/Bencher paddle combo ...	149.99
442X	SlimLine keyer only	89.99
447	SlimLine deluxe keyer	79.99
564	Deluxe iambic chrome paddle	49.99
564B	Deluxe iambic black paddle	49.99

COMPUTER INTERFACES

1224	Interface	\$ 99.99
1265	Disk software for VIC/C64; 1224 Δ	14.99
1285	Software for IBM; 1224	19.99
1264B	Tape software; VIC/C64; 1225 Δ	.99
1265B	Disk software; VIC/C64; 1225 Δ	.99
1270C	Packet radio TNC2	119.99
47C	Mailbox 512K mem; 1270/1274 Δ	69.99
2400	2400 baud modem	D 19.99
9600B	9600 baud modem	D 89.99
1270CT	Turbo packet w/2400 baud	Δ 129.99
1270CQ	Packet w/9600 baud modem	229.99
1276	Packet/Pactor controller	D 139.99
1276T	Packet/Pactor Turbo controller	D 159.99
1278B	Multi-mode controller w/Pactor	279.99
1278B/DSP	Controller w/Pactor & DSP	359.99
45A	32K RAM IC only	D 2.99
48	1278 upgrade	24.99
48B	1278B upgrade	Δ 19.99
52	TNC2 deviation meter board	29.99
52B	FM dev/temp/volt meter for TNC Δ	34.99
56A	Pactor/mailbox 32K board for 1278B ..	69.99
56B	Pactor/mailbox 128K board; 1278B Δ	79.99
56C	Pactor/mailbox 512K board; 1278B Δ	119.99
780	DSP data filter for 1278B	89.99
2400	2400 baud modem	D 19.99
9600B	9600 baud modem	D 89.99
1278BT	Turbo controller/2400/Pactor	Δ 269.99
1282	C64 starter pack	Δ 19.99
1282B	Multicom package; C64/128	29.99
1282BD	Multicom 64 disk only	Δ 6.99
1284	5 1/4" IBM starter pack	Δ 19.99
1284D	1284 disk only	Δ 12.99
1284M	3 1/2" IBM starter pack	24.99
1284MD	1284M disk only	Δ 12.99
1284W	MFJCOM for Windows	29.99
1287	Macintosh starter pack	D 14.99
1287B	Mac multicom starter pack	Δ 39.99
1287D	1287 disk only	D 2.99
1287BD	1287B disk only	Δ 9.99
1288	Packet terminal program	D 5.99
1289	5 1/4" multicom software for IBM	D 24.99
1289D	1289 disks only	D 14.99
1289M	3 1/2" multicom software for IBM	59.99
1289MD	1289M disks only	Δ 39.99
1289W	Multicom for Windows with cable ..	59.99
1289WD	Multicom for Windows, less cable ..	49.99
1293	JV Fax/HamCom soft/FJ-1213	D 2.99
1214PC	Multimode interface for IBM	139.99

MFJ - continued**AES Price**

40B	TNC2 upgrade 32K/RAM	D 4.99
40C	TNC2 upgrade 32K	Δ 14.99
40E	TNC2 packet encryption EPROM	D 6.99
43	Real time clock for TNC	19.99
44	Plug-in scope tuning adapter	D 14.99
781	DSP filter for any TNC or controller	119.99
1271	Packet card for C64/128	D 24.99
1272B	TNC to microphone interface	39.99
1272BYH	TNC/mic switch; KAM HF	39.99
1272BYV	TNC/mic switch; KAM VHF	39.99
1272M	TNC/mic RJ-45 switch; MFJ/PK-900 ..	39.99
1272MYH	TNC/mic RJ-45 switch; KAM HF Δ	29.99
1272MYV	TNC/mic RJ-45 sw; KAM VHF; KPC3 ..	39.99
1273	Packet tuning indicator	D 2.99

SSB/CW FILTERS

722	SSB/CW notch filter	Δ \$ 59.99
751B	Super tunable CW audio filter	69.99
752C	Dual tunable SSB/CW filter	89.99
784B	Deluxe tuneable DSP filter	229.99
5184	Cable pack for 784B	7.99

PHONE PATCH

624D	Phone patch w/audio VU meter	\$119.99
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DUMMY LOADS

250	2kw PEP dummy load w/oil	\$ 59.99
250X	2kw PEP dummy load, less oil	39.99
21	1 gal industrial xfmr oil for wet dummy	24.99
260C	300w 0-650 MHz dry dummy load	34.99
260CN	300w 0-650 MHz type N dry dummy ..	39.99
264	1.5kw 0-650 MHz dry dummy load	69.99
264N	1.5kw 0-650 MHz type N dry dummy ...	79.99

SWR/WATTMETERS

812B	144-220 MHz SWR/FS/wattmeter	\$ 34.99
815B	160-6m cross-needle SWR/wattmeter ..	79.99
816	1.8-30 MHz toroidal SWR/wattmeter	34.99
817	2m/440 cross needle meter	89.99
840	2m 5w wattmeter/dummy load for HT Δ	14.99
841	2m 5w in-line HT wattmeter/SWR	39.99
844	Compact 2m/440 SWR/wattmeter	69.99
860	1.8-60 MHz cross-needle meter	44.99
862	2m/220/440 cross-needle meter	54.99
864	1.8-60MHz/2m/440 cross needle meter .	84.99
870	1.6-60MHz Grandmaster SWR/wattmeter ..	124.99
872	1.8-200MHz Grandmaster SWR/wattmeter ..	94.99
873	125-525MHz Grandmaster SWR/wattmeter ..	104.99
874	1.8-525MHz Grandmaster SWR/wattmeter .	159.99

SHORTWAVE ACCESSORIES

306	Car radio SWL converter	\$ 89.99
956	LW/MW/SW preselector/tuner	49.99
959B	Receiver ant tuner w/preamp	99.99
1020B	.3-30 MHz indoor active rcv ant	79.99
1022	300KHz-200MHz active rcv antenna	49.99
1024	.05-30 MHz outdoor active rcv ant	129.99
1040B	Deluxe receiver preselector	99.99
1045C	Receiver preselector	Δ 49.99

BOOKS

30	Golden Classics book	\$ 9.95
31	Oscar book	Δ 4.99
32	Packet Made Easy book	9.95
33	Mobile Handbook book	12.95
35	World of Ham Radio book	7.95
36	Shortwave Listeners Guide; Apts/Condos .	9.95
37	Ham Communications Circuit Files book .	9.95
38	Easy-up Antennas book	16.95
3036	The Packet Radio Operators book	12.95
3101	Fox Hunt Adventure book	7.95
3211	Technician license guide	9.95
3213	General license guide	9.95
3215	Extra license guide	9.95
3301	Troubleshooting Antenna & Feedlines book	12.95
3302	73 Dipole and Long-Wire Antennas	12.95
3303	73 Vertical, Beam, and Triangle Ants ...	12.95
3305	Antennas & Transmission Lines book ...	19.95
3400	Morse Code: Breaking the Barrier	19.95

MFJ - continued**AES Price**

3502	Solid State QRP Projects	12.95
3504	FET Principles, Experiments & Projects ..	16.95
3506	Ferromagnetic-Core Design book	19.95
3507	Practical RF Design Manual	19.95
3508	Radio Components Handbook	D 17.99
3509	Ladder Crystal Filters	19.95

CLOCKS

105C	24-hour quartz wall clock	\$ 19.99
107B	24-hour digital clock	9.99
108B	24/12-hour dual disp digital clock	19.99
112B	Deluxe world map clock	24.99
114B	Giant LED desk/wall 12/24-hr clock ..D	59.99
113	24/12-hr 1.8" LED clock/batt back-up ...	19.99
115	DX'er 24-hour analog world wall clock ..	24.99
1160C	12-hour 12vdc LED clock	Δ 14.99
118	Giant 24/12 hour LCD clock	24.99
119	Giant 24/12 hour LCD/in temp clock ...D	34.99
119B	Giant 24/12 hour LCD/in temp clock	49.99
120	Monster atomic clock/temperature/humidity	69.99
123	Eternity solar atomic clock	79.99
125	Calendar 24-hour analog wall clock	29.99
126	Multi-color 12-hr quartz wall/24-hr trim	24.99
128	12/24 hour analog atomic wall clock	59.99
132AT	12-hour LCD see-thru clock	34.99
134AT	24-hour LCD see-thru clock	34.99
152	Thermo clock; in/out temp/12/24-hr clock D	24.99
152B	Thermo clock; in/out temp/12/24-hr clock	24.99
181	24/12-hour world map wristwatch	D 19.99

ANTENNAS

343	1 1/8" hole mount for 3/8-24 whip	\$ 9.99
1402	2m/440 3/5.5db 16.5" 100w ant only ...	34.99
1412	2m/440 3/5.5db 40" 200w ant only	49.99
1422	2m/440 3.2/5.7db 41.5" 150w ant only ..	49.99
1432	2m/440 5/7.6db 62.5" 150w ant only ..	69.99
1436	6m/2m/440 2.15/4.5/7.2db 59" ant only	79.99
333BM	3.5" HiFlux NMO mag mt; not 1436	14.99
333BS	3.5" HiFlux SO-239 magt mt not 1436 ..	14.99
335BM	5" HiFlux NMO mag mt; not 1436 ..	19.99
335BS	5" HiFlux SO-239 mag mt; not 1436 ..	19.99
340	Mirror/luggage pipe clamp mount	34.99
345	Trunk/hatchback lip mount	34.99
1516	2m 15' vertical base antenna	94.99
1522	2m/440 5.5' vertical base antenna Δ	69.99
1524	2m/440 10' vertical base antenna Δ	99.99
1526	2m/440 17' vertical base antenna Δ	139.99
1526N	2m/440 17' N vertical base ant Δ	139.99
1532N	2m/440/1.2GHz 8.2' N vert base ant Δ	89.99
1536	6m/2m/440 8.2' vertical base ant Δ	99.99
1621	40-10m 54" portable ant w/tuner	89.99
1710	2m 3/4 wave telescopic antenna	9.99
1712	2m/440 telescopic antenna	14.99
1713	2m/440 SuperFlex Thin Duk HT ant	19.99
1713S	2m/440 SuperFlex SMA Thin Duk ant .	19.99
1714	2m 1/2 wave telescopic antenna	16.99
1715	2m/440 SuperFlex gain Thin Duk HT ant	24.99
1715S	2m/440 SuperFlex gain SMA Thin Duk	24.99
1716	2m/440 duck for HT	16.99
1716S	2m/440 SMA duck for HT	16.99
1717	2m/2.15db 440 duck for HT	21.99
1717PL	2m/440 foldover flexi-duck, PL-259 .	24.99
1717S	2m/2.15db 440 SMA duck for HT	21.99
1718	2m shorty duck for HT	D 9.99
1719	2m/440/1.2GHz Midget Duck	19.99
1719S	2m/440/1.2GHz SMA Midget Duck	19.99
1721	2m HT UltraLite mag mt antenna	14.99
1722	2m/440 HT UltraLite mag mt antenna .	18.99
1724B	2m/440 magnet mt antenna	16.99
1727	10m magnet mt antenna	39.99
1728B	6m 3/4 wv/2m 3/4 wv mag ant/PL259/BNC	29.99
1729	2m/440 magnet mt antenna	34.99
1730	2m pocket roll-up vertical antenna	19.99
1734	2m/440 2.6/6.3db glass mt antenna ...	39.99
1736	6m J-Pole travel antenna	29.99



MFJ - continued**AES Price**

1738	2m 2.6db glass mt antenna	29.99
94	Remount kit for 1734/1738	4.99
1740	2m 1/4 wave ground plane ant	19.99
1750	2m 1/2 wave ground plane ant	24.99
1752	220 3/4 wave ground plane ant	24.99
1754	2m/440 ground plane antenna	29.99
1756	6m DX vertical antenna	79.99
1762	6m 6db 3 el 6' boom beam	79.99
1763	2m 3el portable beam	44.99
1764	2 & 6m dual 3/4 super gain base ant	49.99
1768	2m/440 4/7 el beam antenna	79.99
1778	G5RV 160-10m 102' ant (needs tuner)	39.99
1786	Super Hi-Q 10-30 MHz loop/dlx control	349.99
1312B	12vdc 300ma adapter; 1782/1786	14.99
1788	Super Hi-Q 40-15m loop/dlx controller	389.99
1793	80/40/20m vertical antenna	149.99
1796	40/20/15/10/6/2m 10' vertical ant	189.99
1798	80/40/30/20/17/15/12/10/6/2m 20' vert	269.99
1812	2m/440 foldover telescopic HT ant	14.99
1816	2m/440 8.5" flexible/telescopic duck	19.99
1817	2m/440 14.5" flexible/telescopic duck	24.99
1824BB	Cell look alike BNC scanner ant	6.99
1828B	Magnet mt BNC scanner antenna	14.99
1828M	Mag mt Motorola plug scan ant	9.99

CABLES

5020R/5020	MFJ TNC - Yae FT50R/compat	\$ 15.99
5020RYV/5020YV	KAM VHF/KPC3 - Yae 50R/comp	15.99
5022	MFJ TNC - Alinco/Standard HT cable	15.99
5022YV	KAM VHF/KPC3 - Ali/Sta HT cable	15.99
5024	MFJ TNC - Ico/Yae/Alti/RS HT cable	15.99
5024B	PK/PacComm/compat - Ico/Yae/RS	15.99
5024YV	KAM VHF/KPC3 - Ico/Yae/Alti/RS HT	15.99
5026	MFJ TNC - Kenwood HT cable	15.99
5026X	PK-232 - Kenwood HT cable	6.99
5026YV	KAM VHF/KPC3 - Kenwood HT cable	15.99
5060	MFJ TNC - Ken/Yae acc 6-pin mini DIN	19.99
5060YQ	KPC9612 - Ken/Yae acc 6pin mini DIN	19.99
5060YV	KAM VHF/KPC3 - Ke/Ya acc 6pin mni DIN	19.99
5063	MFJ TNC - Icom HF acc 8-pin DIN	19.99
5063YH	KAM HF - Icom HF acc 8-pin DIN	19.99
5064	MFJ TNC - Icom VHF acc 8-pin DIN	9.99
5064YQ	KPC9612 - Icom VHF 8-pin DIN	19.99
5064YV	KAM VHF/KPC3 - Ico VHF acc 8pin DIN	14.99
5065	MFJ TNC - Ico IC-706 acc 13-pin DIN	19.99
5065YH	KAM HF - Ico IC-706 acc 13-pin DIN	19.99
5065YV	KAM VHF - Ico IC706 acc 13-pin DIN	19.99
5066	MFJ TNC - Kenwood HF acc 13-pin DIN	19.99
5066YH	KAM HF - Ken HF acc 13-pin DIN	19.99
5080	MFJ TNC - Yaesu 8-pin cable	15.99
5080M	MFJ TNC - Yaesu 8-pin modular	15.99
5080MYV	KAM VHF/KPC3 - Yae 2500M/7400H	15.99
5080MZ	PK-88 - Yae 2500M/7400H	1.99
5080YH	KAM HF port - Yaesu 8-pin cable	15.99
5080YV	KAM VHF/KPC3 - Yaesu 8-pin cable	15.99
5082	Open end - 8-pin mic cable	9.99
5084	MFJ TNC - Icom 8-pin cable	15.99
5084M	MFJ TNC - Icom 8-pin modular	15.99
5084MYV	KAM VHF/KPC3 - Icom 8-pin mod	15.99
5084MZ	PK-88 - Ico 8-pin modular	2.99
5084YH	KAM HF port - Icom 8-pin cable	15.99
5084YV	KAM VHF/KPC3 - Icom 8-pin cable	15.99
5086	MFJ TNC - Kenwood/Alinco 8-pin cable	15.99
5086M	MFJ TNC - Kenwood 8-pin modular	15.99
5086MYV	KAM VHF/KPC3 - Ken 8-pin mod	15.99
5086YH	KAM HF port - Ken/Alti 8-pin cable	15.99
5086YV	KAM VHF/KPC3 - Ken/Alti 8-pin cable	15.99
5088M	MFJ TNC - Radio Shack 8-pin modular	15.99
5088MYV	KAM VHF - RS 8-pin modular	12.99
5088MZ	PK-88 - RS 8-pin modular	2.99
5205	5-pin DIN open end cable	4.99
5208	Open end - Ico HF/VHF acc 8-pin DIN	9.99
5213	Open end - Kenwood acc 13-pin DIN	9.99
5220R/5220	Open end - Yae FT50R/compat	9.99
5222	Open end - Ali split HT cable	9.99

MFJ - continued**AES Price**

5224	Open end - Ico/Yae/Alti/RS HT cable	9.99
5226	Open end - Kenwood HT cable	9.99
5268	Open end - modular phone plug cable	9.99
5412	IBM printer cable	9.99
5413	RS-232 6' cable DB-25M-25F	7.99
5414	RS-232 6' cable DB-25M-9F	9.99
5803/10	3' coax jumper cable	5.99
RADIOS/TRANSCIVERS		
8100K	Shortwave regenerative Rcvr kit	\$ 69.99
8100W	Shortwave regenerative Rcvr wired	89.99
8121	AM/FM/shortwave portable receiver	39.99
8400K	2m receiver kit	59.99
8400W	2m receiver wired	69.99
9606X	10w 6m FM/data Xcvr/mic/52.525MHz	159.99
8621	5w 2m data radio w/145.01 MHz	119.99
8621X2	5w APRS ready 2m data radio/144.39	139.99
8631	3w 220MHz data radio w/223.70 MHz	119.99
4110	Portable AC power supply	49.99
5100	Data radio cable - MFJ/TAPR	15.99
5100X	Data radio cable - PK-232	4.99
5100YH	Data radio cable - KPC-9612	12.99
5100YV	Data radio cable - KAM/KPC-3	15.99
5106	Open end - 6pin mini Ken/Yae cable	4.99
9015	5w 15m CW Xcvr	169.99
9017	5w 17m CW Xcvr	129.99
9020	5w 20m CW Xcvr	169.99
9030	5w 30m CW Xcvr	169.99
9040	5w 40m CW Xcvr	169.99
27	Handle for CW station	4.99
412	Plug-in Curtis keyer	49.99
726	Plug-in audio filter	29.99
971	200w portable ant tuner w/meter	99.99
1770	Portable 15m dipole	29.99
1771	Portable 17m dipole	29.99
1772	Portable 20m dipole	39.99
1773	Portable 30m dipole	29.99
1774	Portable 40m dipole	39.99
4110	Portable AC power supply	49.99
4114	Rechargeable power pack	69.99
9115B	9015 Xcvr/tuner/ps/ant package	299.99
9117B	9017 Xcvr/tuner/ps/ant package	279.99
9120B	9020 Xcvr/tuner/ps/ant package	299.99
9130B	9030 Xcvr/tuner/ps/ant package	329.99
9140B	9040 Xcvr/tuner/ps/ant package	329.99
9402X	7w PEP 2m SSB Xcvr w/mic	269.99
9406X	10w PEP 6m SSB Xcvr w/mic	249.99
9410X	20w PEP 10m SSB Xcvr w/mic	249.99
9420X	12w 20m SSB Xcvr w/mic	229.99
9440X	12w 40m SSB Xcvr w/mic	229.99
9475X	12w 75m SSB Xcvr w/mic	229.99
415B	SSB Xcvr CW adapter; 9420X/9440X	49.99
416	CW adapter for 9402X/9406X/9410X	49.99
971	200w HF portable ant tuner w/meter	99.99
1770A	10m dipole for 9410X	39.99
1776	6m dipole for 9406X	29.99
4110	Portable AC power supply	49.99
4114	Rechargeable power pack	69.99

ACCESSORIES

1305	5vdc 300ma adapter	\$ 9.99
1306	6v 300ma adapter	14.99
1312	12vdc 300ma adapter, 2.5mm plug	14.99
1312B	12vdc 300ma adapter, 2.1mm plug	14.99
1312C	12vdc 300ma adapter; 2.5mm coaxial	14.99
1315	12vdc 500ma adapter	14.99
15	HamGear belt loop radio holder	14.99
18	HamGear chest harness/cargo pocket	29.99
92AA01	1300ma AA NiMH cell	2.99
92AA10	10-pack 1300ma AA NiMH cells	24.99
201	1.5-250 MHz dip meter	109.99
202B	RF noise bridge	59.99
203	160-10m bandswitched dip meter	89.99
204B	Antenna bridge	79.99
206	Antenna current probe	79.99

MFJ - continued**AES Price**

207	160-10m SWR analyzer	79.99
208	2m SWR analyzer	79.99
209	1.8-170 MHz SWR analyzer	129.99
212	MatchMaker tune up device	79.99
214	Amplifier Saver	34.99
216	Deluxe Amplifier Saver	44.99
217	SWR analyzer, 30-50 MHz	19.99
218	SWR analyzer, 150-170 MHz	29.99
219B	SWR analyzer, 440 MHz/N/SO-239 adapt	89.99
224	2m FM signal analyzer	149.99
229	270-480MHz SWR analyzer	149.99
249B	1.8-170 MHz SWR anal/LCD counter	219.99
259B	1.8-170 MHz SWR anal/RF res meter	239.99
269	1.8-170+440 MHz SWR anal/RF res mtr	319.99
29C	Carrying case w/window; 209/249B/259B	24.99
39/39C	Carrying case w/window; 269	24.99
66	1.8-30/30-170 dip coils; 209/249B/259B	19.99
92AA10	10-pack 1300ma AA NiMH cells	24.99
98	Package of 39(39C)/66/1315; for 269	54.99
98B	Pack of 92AA10/39(C)/66/1315 for 269	77.99
99	Pack of 29C/66/1315; 209/249B/259B	54.99
99B	Pack of 92AA10/29C/1315; 209/249B/259B	77.99
99C	Pack - 92AA10/1315; 209/249B/259B/269	34.99
731	RFI filter for SWR analyzer	89.99
1315	12vdc 500ma ps for SWR analyzers	14.99
270	Guardian Angel 400w PEP lightning protect	29.99
97	Gas tube plug for 270	9.99
281	ClearTone communications speaker	12.99
285W	Mini spkr/mic for Icom IC-W2A	9.99
285W(CC)	Mini spkr/mic; Alinco credit card HTs	17.99
287	Mini spkr/mic; Kenwood	12.99
287L	Mini spkr/mic L for Kenwood	9.99
288I	Headset/mic; Icom/ADI/Sta/RS/older Yae	24.99
288K	Headset/mic for Kenwood	24.99
288Y	Headset/mic; Ico Q7/Yae FT10/50/VX1	24.99
291I	Earphone for Icom spkr/mic	3.99
291K	Earphone for Kenwood spkr/mic	4.99
292I	Earph/mic; Ico/older Yae/compatibles	17.99
292K	Earphone/mic for Kenwood HT	12.99
292Y	Earphone/mic; Ico Q7/Yae FT10/50/VX1	17.99
293I	Rubber flex earloop earbud/mic; Icom	24.99
293K	Rubber flex earloop earbud/mic; Kenwood	24.99
293Y	Rubber flex earloop earbud/mic; Yaesu	24.99
295I	Mini spkr/mic; Icom & compatible HT	15.99
295K	Mini spkr/mic; Kenwood & compatible HT	15.99
295Y	Mini spkr/mic; Ico Q7/Yae FT10/50/VX1	15.99
296I	Spkr/mic w/vol control, PTT lock; Icom	19.99
297	Desk mic with flexible boom	69.99
5397I	Cable/8-pin for 297; Icom HF	15.99
5397K	Cable/8-pin for 297; Kenwood HF	15.99
5397Y	Cable/8-pin for 297; Yaesu HF	15.99
5397MI	Cable/RJ-45 for 297; Icom VHF	15.99
5397MK	Cable/RJ-45 for 297; Kenwood VHF	15.99
5397MY	Cable/RJ-45 for 297; Yaesu VHF	15.99
310	BNC HT antenna window mount clip	14.99
312	BNC HATennaClip antenna mount	10.99
315	Universal Gripmatic HT mount holder	14.99
323	Keep-it-up battery maintainer	6.99
338S	5" tri-mag mount, SO-239	49.99
338T	5" tri-mag mount, NMO	49.99
341M	17' antenna cable; NMO	19.99
341S	17' antenna cable; SO-239	19.99
382	Deluxe amplified communications spkr	39.99
384	Dix amp spkr w/speech control knob	29.99
1306	6v 300ma adapter for 384 only	14.99
388	Cyber Ear 12db ear amplifier	29.99
392	Deluxe communication headphones	19.99
394	Boom mic/single headphone	74.99
396	Boom mic/headphones	79.99
1709	PTT operator foot switch; 394/396	21.99
5396I	Adapter; 394/396 with Ico Xcvr	15.99
5396K	Adapter; 394/396 with Ken Xcvr	15.99
5396Y	Adapter; 394/396 with Yae Xcvr	15.99
411	Personal Morse Code Tutor	39.99



MFJ - continued

	AES Price
413 Basic Code Tutor	29.99
414 Professional Morse Tutor w/LCD	189.99
417 Code Tutor with QSO	59.99
418 Code Tutor with LCD display	79.99
26 Carrying case for 418	12.99
434 Deluxe Voice Memory Keyer	169.99
73 Remote control head w/cable for 434	29.99
462B RTTY/ASCII/CW/AMTOR Rcvr multi-reader	169.99
5162 Receiver cable for 462B	4.99
550 Hand key	7.99
552 CW interface for 2m HT	79.99
554 Deluxe CW practice oscillator	79.99
554X Dlx oscillator w/281 spkr/550 key	89.99
557 Code oscillator w/key	29.99
631 Trickle wall charger; NiMH/nicad AA	9.99
632 Rapid charger; NiMH/nicad AA/AAA	19.99
641-I2 Battery charger; Icom BP-131/132	39.99
10-BCI-2 Charger cup; Icom BP-131/132	9.99
641-I3 Battery charger; Icom BP-173/180	39.99
10-BCI-3 Charger cup; Icom BP-173/180	9.99
641-Y2 Batt cgr; Yae FNB-10/11/12/17/27	39.99
10-BCY-2 Cgr cup; Yae FNB10/11/12/17/27	9.99
641-Y3 Battery charger; Yae FNB-31/33	39.99
10-BCY-3 Charger cup; Yae FNB-31/33	9.99
641-Y4 Batt cgr; Yae FNB-40/41/V47/49	39.99
10-BCY-4 Cgr cup; Yae FNB40/41/V47/49	9.99
662 Simplex pocket repeater	79.99
701 Toroid RFI filters	14.99
702 200w low-pass filter	24.99
704 1kw low-pass filter	49.99
711 High pass filter	24.99
713 2m HT intermod filter	59.99
714 2m mobile intermod filter	49.99
762 81db 170MHz BNC attenuator	69.99
801 Super compact field strength meter	19.99
802 Bipolar field strength meter	39.99
802R Field strength remote meter	24.99
802RX/802X Field strength/rem meter combo	59.99
805 RFI current detector meter	79.99
850 AC line voltage monitor	19.99
852 Power line noise current meter	89.99
854 RF current meter	89.99
886 Pocket frequency counter	109.99
912 W9INN remote balun	49.99
916 2m/440 duplexer	29.99
931 Artificial ground unit	89.99
1025 Noise canceling antenna	149.99
1026 Deluxe noise canceling unit w/antenna	169.99
1046 1.6-33MHz receiver passive preselector	89.99
1048 1.6-33MHz Xcvr passive preselector	109.99
1112 Multiple DC outlet	34.99
1116 Dlx multiple DC outlet	49.99
1117 High current multiple DC outlet	54.99
1118 Dlx high current multiple DC outlet	74.99
1213 Interface for JVFA/HamComm	49.99
1266 C64 disk code tutor program	1.99
76 1266/67 interface brd; kyr/keyboard	.69
1268 IBM PC memory keyer	4.99
1269 IBM code tutor	14.99
1281 IBM Easy-DX logging program	19.99
1292 Video digitizer for IBM	49.99
1680Y Windows software package; Yae	29.99
1682 Packet Windows software	4.99
1683I Rig Windows software for Icom	19.99
5383I Icom Xcvt interface cable	39.99
1683K Rig Windows software for Kenwood	19.99
5383K Kenwood Xcvt interface cable	39.99
1683Y Rig Windows software for Yaesu	19.99
5383Y Yaesu interface cbl, std 6-pin DIN	39.99
5383YB Yaesu interface cbl, mini 6-pin DIN	39.99
1700B Combination ant/xmtr switch	79.99
1701 6-position coax switch	49.99
1702C 2-pos coax switch/lightning protect	24.99
1702CN 2-pos 1.1GHz N switch/lightning protect	34.99

AES Price

MFJ - continued

	AES Price
1704 4-pos 500 MHz switch/lightning protect	64.99
1704N 4-position type N switch	74.99
4035MV Dlx 30A adjustable ps, 35A surge	139.99
4125MV MightyLite 22A 3.5 lb switch ps, 25A surge	99.99
4225MV MightyLite 22A switching ps, 25A surge	139.99
4245MV MightyLite 40A switching ps, 45A surge	189.99
4312 12A ps w/cig lighter socket	49.99
4322 22A ps w/cig lighter socket	69.99
5002 Digital/analog breadboard trainer spec order	329.99

MG Electronics (MGE)

HFS-1 10w mobile spkr, 3.5mm plug D \$ 19.99

MAGELLAN (MAG)

GPS-300 GPS receiver	D \$ 99.99
GPS-310 12 ch GPS receiver	119.99
GPS-315 12 ch GPS receiver	149.99
GPS-320 12 ch GPS receiver	199.99
730275 External power cable w/cig adapter	14.99
730277 PC cable/cig adapt; GPS-315/320	39.99
00-09018-000 PC ext pwr cig cbl; 2000XL	9.99
00-69007-000 Ext pwr/data module; 2000XL	29.99
GPS ColorTRAK 12 ch color GPS/carry case D	269.99
GPS Tracker 12 ch GPS w/wrist strap	199.99
00-19044-000 Low profile external ant	95.99
00-19060-000 Power/data cable	24.99
00-19067-000 PC cable w/cig adapter	39.99
MAP-330 12 ch GPS receiver w/8mb base map	249.99
730275 External power cable w/cig adapter	14.99
730277 PC cable/cig adapter	39.99
Meridian XL GPS/plot/detach ant/case	D 199.99

MAHA (MAH)

9V 8.4v 170ma 9v size NiMH batt cell	ea \$ 8.99
AAA-T 1.2v 650ma AAA size NiMH batt cell ea	2.99
AA-FB 1.2v 1400ma AA NiMH batt cell w/tabs ea	2.99
AA-T 1.2v 1400ma AA size NiMH batt cell D,ea	2.99
AA-155 1.2v 1550ma AA size NiMH batt cell ea	3.99
C-380 1.2v 3800ma C size NiMH batt cell ea	11.99
D-800 1.2v 8000ma D size NiMH batt cell ea	16.99
MH-244 Slow charger for 4 max AA NiMH	D 4.99
MH-C124S Reg cgr; 1-4 AA/AAA NiMH/NiCD	9.99
MH-C204F Quik cgr/condi; 2/4 AA/AAA NiMH/NiCD	24.99
MHS-DC-124 Cig adapter; MH-C124S/C204F	5.99
MH-BP-7 900ma 13.2v Icom nickel hydride	69.99
MH-BP-8 1200ma 8.4v Icom nickel hydride	59.99
MH-BP-8H 1800ma 8.4v Icom nickel hydride	69.99
MH-BP-83 1200ma 7.2v Icom nickel hydride	49.99
MH-BP-132B 1200ma 12v Ico blk nick hyd/mic	59.99
MH-BP-132G 1200ma 12v Ico gray nick hyd/mic	59.99
MH-BP-173 650ma 9.6v Icom nickel hydride	69.99
MH-BP-180 1000ma 7.2v Icom nickel hydride	49.99
MH-BP-196M 1350ma 9.6v Icom nick hydride	49.99
MH-BP-199 700ma 6v Icom nick hydride/clip	55.99
MH-BP-200 680ma 9.6v Icom nick hydride/clip	59.99
MH-CN8-152 1000ma 12v Sta nickel hydride	59.99
MH-CN8-153 1300ma 7.2v Sta nickel hydride	49.99
MH-FNB-12 900ma 12v Yaesu nickel hydride	49.99
MH-FNB-17 900ma 7.2v Yaesu nickel hydride	49.99
MH-FNB-27 900ma 12v Yaesu nickel hydride	59.99
MH-FNB-31 650ma 4.8v Yaesu nickel hydride	49.99
MH-FNB-38 650ma 9.6v Yaesu nickel hydride	59.99
MH-FNB-40H 650ma 7.2v Yae nick hyd/ spg clip	59.99
MH-FNB-41 900ma 9.6v Yae nick hyd/spg clip	55.99
MH-FNB-V47 1800ma 7.2v Yae nick hyd/spg clip	69.99
MH-FNB-V57 1500ma 7.2v Yaesu nickel hydride	49.99
V47 Belt Clip Spring loaded belt clip for Yae	6.99
MH-PB-8 1300ma 12v Kenwood nickel hydride	62.99
MH-PB-17 1300ma 12v Kenwood nickel hydride	69.99
MH-PB-18 1300ma 7.2v Ken nick hyd; wall cgr only	49.99
MH-PB-32 1000ma 6v Kenwood nickel hydride	47.99
MH-PB-34 900ma 9.6v Kenwood nickel hydride	57.99
MH-PB-39 1050 ma 9.6v Ken nickel hyd/clip	59.99
MH-PB-39H 1800ma 6v Ken nickel hyd/clip	59.99

AES Price

MAHA- continued

	AES Price
MH-C777 Univ cgr/conditioner/cig cord; nicad/nimh	49.99
MHS-CW4 Clip-leads for external charging	3.99
MH-C888 Univ drop-in rapid cgr/cond; nicad/nimh	59.99
MHS-C800U External charger pin shell	14.99
MHS-C801 Cup; ICW32A/TH22/79/FT10/50	7.99
MHS-C802 Cup; IC02AT/TH78/FT470/530	7.99
MHS-C803 Cup; Kenwood TH-D7A/G71A	7.99
MHS-C804 Cup; Icom IC-T8A/T81A	7.99
MHS-C805 Cup; Yaesu FT-11/41/51R	7.99
MHS-C806 Cup; Ali 195/580/F1/G5/V5/etc	7.99
MHS-DC-777 Cig lighter cord	5.99
MH-101-I1 Cgr;ico157/160/174/131/2Mah 132B/G D	29.99
MH-101-I3 Cgr;ico 171/172/173/180/Mah BP173 D	39.99
MH-101-Y1 Cgr;Yae 10/11/12/17/25/27/Mah 12/27 D	39.99
MH-101-Y2 Cgr;Yae FNB31/38/Mah MHFNB38 D	39.99
MH-800K 500mw spkr/mic w/clip; Kenwood	19.99
MH-800S 500mw spkr/mic/clip; Ali/Ico/Sta/Yae	19.99
MH-800Y 500mw spkr/mic; Yae FT50/VX1R	24.99
MH-A101 5/35w 2m FM amplifier	69.99
MH-A102 5/35w 2m FM/SSB amp/preamp	89.99
MH-A103 5/50w 2m FM/SSB amp/preamp	119.99
MH-A104 5/100w 2m FM/SSB amp/preamp	229.99
MH-A201 5/45w 2m/5/35w 440 FM amp	159.99
MH-A301 5/50w 2m HT dock boost amp/pre	115.99
MH-A302 5/45/5/35w 2m/440 HT dock boost	165.99
MHS-I1 Ico 26/02/2/32 adapter; A301/302	9.99
MHS-I2 Ico 25AT/W2 adapter; A301/302	4.99
MHS-I3 Ico 26XAT/W21AT adapt; A301/302	9.99
MHS-I4 Ico W32/31/77/22 adapt; A301/302	11.99
MHS-I5 Ico T8AT/81A adapter; A301/302	11.99
MHS-K1 Ken 25/26/75/77 adapt; A301/302	9.99
MHS-K2 Ken TH22/79 adapter; A301/302	9.99
MHS-K3 Ken G71A/D7A adapt; A301/302	11.99
MHS-S1 ADI/Standard adapter; A301/302	9.99
MHS-Y1 Yae 23/411E/470 adapt; A301/302	9.99
MHS-Y2 Yae 26/415/530 adapt; A301/302	9.99
MHS-Y3 Yae FT11/41/51 adapt; A301/302	11.99
MHS-Y4 Yae FT10/40/50 adapt; A301/302	11.99
MH-VOX-K Deluxe VOX spkr/mic; Kenwood	19.99
MH-VOX-S Dlx VOX spkr/mic; Ali/Ico/Sta/Yae	19.99

MALDOL (MAL)

ARS-440 440 5.5db 38.4" mobile antenna	\$ 19.99
ARS-440B Black 440 5.5db 38.4" mob ant	19.99
AS-20 2m/440 8.5" superflex SMA antenna	29.99
AS-25 2m/440 1" SMA antenna	19.99
AS-30 2m/440 15" 0/2.15db superflex SMA ant	29.99
EM-B80 Small trunk/hatch/van door lip mt	25.99
EX-104B 2m/440 black 0/2.15db 15" mob	41.99
EX-104BNMO 2m/440 blk 0/2.15db 15" NMO	41.99
EX-107RB 2m/440 black 2.6/4.9db 29" mob	52.99
EX-107RBNMO 2m/440 blk 2.6/4.9db 29" NMO	52.99
FVS-50 Dlx 2-step 16" 9" cable w/UHF connects	39.99
MH-209 2m/440 3" BNC duck	23.99
MH-209SMA 2m/440 3" SMA duck	23.99
MH-510 6m/2m/440 0/0/3.2db 20.75" SMA duck	37.99
MK-30H Motorized tnk lip/hatch/van door mt	104.99
MSG-1000C 2m/440 2.15/5.5db 39" mobile	62.99
MSG-1100C 2m/440 3.5/6db 42" mobile ant	72.99
PR-212D 2m/440 6/8.5db 85" mobile ant	99.99
PR-212DNMO 2m/440 6/8.5db 85" NMO mob	99.99
PRM-T Large trunk/hatch/van door lip mt	29.99
SHG-140B 2m 4.1db 56" mobile antenna	54.99
SHG-140BNMO 2m 4.1db 56" NMO mob ant	54.99
SHG-1500B 2m/440 blk 4.5/7.5db 59" mob	82.99
SHG-1500BNMO 2m/440 blk 4.5/7.5db 59" NMO	82.99

MAXON (MAX)

27-KC Docking handheld/AM Mobile CB	\$ 39.99
FRS-114 FRS handheld	D 39.99
WTA-9F Ear speaker; FRS-114	.69
GMRS-21X 1w 2ch GMRS/batt/cgr/AA holder	99.99
MX-49FX 5 ch 49 MHz ear mic Xcvt	49.99
MX-49HX 5 ch 49 MHz boom mic/headset Xcvt	49.99



Maxon - continued**AES Price**

MX-49SX 49 MHz boom mic/headset Xcvr	29.99
PC-50 5ch 49MHz hand-held/PTT/VOX headset	49.99
WX-70 Weather monitor/alert w/ps	39.99

MEADE (MEA)

0605-04-01 ETX-60AT Astro telescope	\$299.99
0705-04-01 ETX-70AT Astro telescope	349.99
07220 #933 45° 1.25" erecting prism	74.99
07279 #670 dew shield	22.99
3514-03-04 ETX-90EC Astro telescope	595.99
0515-03-01 ETX-125EC Astro telescope	895.99
07436 #497 Autostar controller; ETX-90/125EC	149.99
07021 #883 Deluxe field tripod; all ETX	199.99
20060 DS-60 60mm refractor telescope	199.99
20061 DS-60EC 60mm refractor telescope	269.99
20071 DS-70EC 70mm refractor telescope	299.99
20091 DS-90EC 90mm refractor telescope	499.99
20114 DS-114EC 114mm reflector telescope	399.99
07217 #928 45° 1.25" erecting prism; DS60/70/90	59.99
07437 #495 Autostar controller; DS-series	99.99
07170-02 1.25" 6.4mm super Plossl lens	89.99
07173-02 1.25" 12.4mm super Plossl lens	89.99
07273 #126 1.25" 2x short-focus Barlow lens	59.99

MIDLAND (MID)

23-505 1.5-150MHz dual meter SWR/power	\$ 19.99
74-109 Weather/hazard alert radio w/ps	39.99
74-200 SAME weather/hazard alert radio/ps	59.99
74-210 SAME weather/hazard alert radio/ps	89.99
75-510XLB Family radio handheld/batts/cgr D	79.99
22-410 Speaker/mic for 75-510XLB	19.99
22-430 Throat mic/ear/PTT box; 75-510XLB D	34.99

MIRAGE (MIR)

A-1015G 50-52 FM/SSB 10/150w amp/preamp	\$349.99
B-34 2m FM 2/35w amplifier	69.99
B-34G 2m FM/SSB 3.5/35w amp/preamp	89.99
B-55G 2m FM 50w amp for handheld	109.99
B-215G 2m FM/SSB 2/150w amp/preamp	339.99
B-310G 2m FM/SSB 4/100w amp/preamp	179.99
B-320G 2m FM/SSB 50/200w amp/preamp	399.99
B-510G Dlx 100w 2m FM amp for HT/mobile	209.99
B-1016G 2m FM/SSB 10/160w amp/preamp	339.99
B-1030G 2m FM/SSB 10/300w amp/preamp	619.99
B-2516G 2m FM/SSB 25/160w amp/preamp	269.99
B-2530G 2m FM/SSB 25/300w amp/preamp	619.99
B-5016G 2m FM/SSB 50/160w amp/preamp	269.99
B-5030G 2m FM/SSB 50/300w amp/preamp	599.99
BD-35 2m/440 4/45/4/35w HT amp	149.99
BD-38/BD-38G 2m/440 4/80w HT amp/preamp	279.99
B-24G 5/50w 2m HT dock boost amp/pre	114.99
BD-25 5/45/5/35w 2m/440 HT dock boost	164.99
MI-1 lco 2G/02/2/32 adapter; B24G/BD25	9.99
MI-2 lco 2SAT/W2 adapter; B24G/BD25	9.99
MI-3 lco 2GXAT/W21AT adapt; B24G/BD25	9.99
MI-4 lco W32/31/T7/22 adapt; B24G/BD25	9.99
MK-1 Ken 25/26/75/77 adapt; B24G/BD25	9.99
MK-2 Ken 22/79 adapter; B24G/BD25	9.99
MS-1 ADI/Standard adapter; B24G/BD25	9.99
MY-1 Yae 23/411E/470 adapt; B24G/BD25	9.99
MY-2 Yae 26/415/530 adapt; B24G/BD25	9.99
MY-3 Yae FT11/41/51 adapt; B24G/BD25	9.99
MY-4 Yae FT10/40/50 adapt; B24G/BD25	9.99
C-22G 220 FM/SSB 2/20w amp/preamp	154.99
C-211G 220 FM/SSB 2/110w amp/pre	299.99
C-1012G 220 FM/SSB 10/120w amp/preamp	299.99
C-1022G 220 FM/SSB 10/220w amp/preamp	589.99
C-2512G 220 FM/SSB 25/120w amp/preamp	289.99
C-2522G 220 FM/SSB 25/200w amp/preamp	589.99
C-5012G 220 FM/SSB 50/120w amp/pre	299.99
C-5022G 220 FM/SSB 50/200w amp/preamp	579.99
D-15N 430 FM/SSB/ATV 2/15w type N amp ...	169.99
D-26N 440 FM/SSB 2/60w type N amplifier ..	244.99

Mirage - continued**AES Price**

D-1010N 440 FM/SSB 10/100w type N amp ..	354.99
D-3010N 440 FM/SSB 30/100w type N amp ..	329.99
D-1010-ATVN 430 ATV 10/100w type N amp ..	369.99
RC-1* Remote control head w/18' cable	45.99

*Not for B-23/C-22/D-26

The following Repeater Amplifiers Special Order. Specify SO-239 or type N connectors

A-1015NR 6m FM 2/80w type N amplifier	\$539.99
A-1015R 6m FM 2/80w SO-239 amplifier ..Δ	399.99
B-215NR 2m FM 1/110w type N amplifier	524.99
B-215R 2m FM 1/110w SO-239 amplifier	504.99
B-1016NR 2m FM 2/120w type N amplifier ..	559.99
B-1016R 2m FM 2/120w SO-239 amplifier	539.99
B-2516NR 2m FM 12/120w type N amplifier ..	519.99
B-2516R 2m FM 12/120w SO-239 amplifier ..	499.99
C-211NR 220 FM .5/80w type N amplifier	584.99
C-211R 220 FM .5/80w SO-239 amplifier	564.99
C-1012NR 220 FM 5/90w type N amplifier	584.99
C-1012R 220 FM 5/90w SO-239 amplifier	564.99
C-2512NR 220 FM 15/90w type N amplifier ..	559.99
C-2512R 220 FM 15/90w SO-239 amplifier ..	539.99
D-1010NR 440 FM 4/80w type N amplifier ...	589.99
D-3010NR 440 FM 12/80w type N amplifier ..	564.99
D-1010-ATVN-R 430 ATV 4/80w type N amp ..	589.99

PREAMPS

KP-1/10M 10m in shack preamp	\$129.99
KP-1/6M 6m in shack preamp	129.99
KP-1/2M 2m in shack preamp	129.99
KP-1/220 220 in shack preamp	129.99
KP-1/440 440 in shack preamp	129.99
KP-2/10M 10m mast mount preamp	179.99
KP-2/6M 6m mast mount preamp	179.99
KP-2/2M 2m mast mount preamp	179.99
KP-2/220 220 mast mount preamp	179.99
KP-2/440 440 mast mount preamp	179.99

WATTMETERS

MP-1 160-10m 25/200/2kw PEP wattmeter ..	\$219.99
MP-2 6 & 2m 50/500/1.5kw PEP wattmeter ..	219.99
MP-3 420-450 5/50/150w PEP wattmeter	249.99

Monitor America (MON)

Monitor America Scanner frequency book	\$ 29.99
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MOTOROLA (MOT)

50995 Camouflage TalkAbout Plus FRS	\$ 59.99
53543 Camouflage TalkAbout 250 FRS	89.99
53590 Blue TalkAbout 250 FRS	79.99
53592 Black TalkAbout 250 FRS	79.99
50226 Headset w/microphone	14.99
53716 Black TA-280SLK NiMH FRS	99.99
53770 Dark slate FR50 FRS	49.99
53725 Headset w/microphone	14.99
53544 2w grey TalkAbout Distance GMRS	189.99
53547 2w grey TalkAbout Distance DPS GMRS ..	199.99
50226 Headset w/microphone	14.99

NCG (NCG)

BB-516 Motorcycle intercom set	\$ 39.99
BJP-514K Motorcycle earphone/mic; Ken	39.99
MC-910 Ear/bm mic w/cap-clip/ear hook; not Ken D	14.99
MC-910K Ear/bm mic w/cap-clip/ear hook; Ken HT D	14.99
MH-900PK Earpc/boom mic/PTT; Ken HT	6.99
MP-28 Boom mic/headset/PTT; all HT but Ken D	24.99
MP-28K Boom mic/headset/PTT for Ken HT D	24.99
NCG-2050 1.6-60MHz 30/300/3kw meter	129.99
NCG-3000 118-530MHz 5/20/200w PEP meter ..	99.99
Power Pocket 12v 2AH lead acid belt batt/cgr ..	66.99
RP-150 20A variable ps/lighted meters/fan ..	159.99
RP-300 30A variable ps/lighted meters/fan ..	239.99

NEW WAVE (NEW)

Adventurer 12' extended Portable alum mast ...	\$109.99
Traveler 19' extended Portable alum mast	124.99
Rover 26' extended Portable alum mast	149.99

New Wave- continued**AES Price**

Expeditioner 33' extended Portable alum mast ...	174.99
Explorer 40' extended Portable alum mast ..	199.99
Big Foot Welded, unpainted park-on mt	119.99
Snap-on Mount Clamp on mt; ant-mast ...	19.99

NORCOMM (NOR)

NC-101 Tunable CTCSS encoder	\$ 19.99
NC-104 Programmable CTCSS encoder	24.99
NC-106 Prog CTCSS encoder/decoder	59.99
NC-401 Sub-miniature DTMF decoder	59.99

NYE VIKING (NYE)**ANTENNA TUNERS AND ACCESSORIES**

MBV-A 3kw tuner with ant switch & meters ..	\$879.99
020-001 2kw low-pass filter	56.99

MASTER KEY

330-001 Black enamel base w/cable, plug ...	\$ 72.99
330-C Chrome plated Master Key/cable/plug ..	139.99

HEAVY DUTY SPEED-X KEYS WITH NAVY KNOBS

320-001 No shorting switch	\$ 44.99
320-003 As above, w/shorting switch	51.99
322-001 Brass hardware, no switch	35.99
322-003 As above, w/shorting switch	44.99

STANDARD SPEED-X KEYS

310-001 Black, no shorting switch	\$ 40.99
310-003 As above, w/shorting switch	29.99
312-001 Brass arm, no shorting switch	32.99
312-003 As above, w/shorting switch	24.99

OAK BAY (OAK)

CA-232HH Handheld packet cable	D \$ 4.99
CA-232U Universal packet cable	D 4.99

Oregon Scientific (ORE)

BA-812E The weather clock	\$ 49.99
PE-319 Pedometer with personal security	29.99
RM-116E Exactset radio controlled clock	39.99
WM-918 Dlx weather station w/rain gauge	199.99
SW-918 PC software/cable for WM-918	29.99
WMR-918 Dlx wireless WX stn w/rain gauge D	329.99
WR-102 Port WX/hazard radio/SAME alert	49.99
WR-3300 Weather/hazard radio/alert w/ps ...	29.99
WR-8000 Portable WX/hazard radio/alert	39.99
WR-8800 Port WX/hazard radio/alert w/ps ..D	49.99

OUTBACKER (OUT)

OB-8 300w PEP 6' 75-10m 8-band mobile ant	\$279.99
OB-8HP 500w PEP 6' 75-10m 8-band mob ant	299.99
OB-SB 8-band 300w PEP split ant/storage bag	299.99
OB-8TRI 3-pc 300w PEP 6' 8-band port ant ..	329.99
OB-M 300w PEP 6' 75/40/20/17/10m/HF marine	429.99
Perth 150w PEP 7.5' 75-10m mobile ant	289.99
Perth Plus 150w PEP 6' 75-10m+6m/2m mob ant	299.99
Stealth Plus 100w PEP 4' 75-10m+6/2m ant	269.99
Outreach 300w PEP 12' 160-10m antenna ...	399.99
Outreach 500 600w PEP 12' 80-6m antenna	439.99
Outrunner 150w PEP 9' 160-10m antenna ...	349.99
(ALP) Outpost Base tripod mtg sys for mob ant	199.99
OB-SB ¾-24 spring and ½" hole base	99.99
Diamond K-400-3/8C ¾-24 trunk mt, 6' coax	69.99
Diamond C-110 10' ext cable; K-400-3/8C	14.99

PACCOMM (PAC)

APRS port switch	\$ 29.99
HandiPacket Small TNC for handhelds	229.99
PicoPacket TNC, 128K RAM	149.99
PicoPacket battery model TNC, 128K RAM	209.99
PicoPacket dual serial port TNC, 128K RAM ...	199.99
Spirit-2 Standard high performance controller	239.99
Tiny-2 Mk-2 Multi-purpose TNC	149.99
Tiny-2 Mk-2/GPS TNC w/GPS & mag GPS ant	499.99

Palomar Engineers (PAL)

150-550 KHz plug-in loop (LF, 1750m)	\$ 74.99
1.6-5 MHz plug-in loop (160m, 80m)	74.99



Palomar - continued AES Price

FER-2 RF ferrite toroid kit	Δ	14.99
MSB-3 Magnetic switch receive balun	D	39.99
PS-95 AC adapter for M-835/840	D	6.99
PT-340 Tuner-Tuner (use with ant tuner)		99.99
RFI-4 RF interference kit		25.99
SMB-5 SmartBridge prog; AT computers	D	.69
VLF-A VLF converter; 10-500 KHz to 80m		89.99
VLF-S VLF conv; 10-500 KHz to 4-4.5 MHz		89.99

PAR (PAR)

50-EL3 6m 3 el beam, 5' boom, 7db	D	\$ 89.99
144-AUX 2m 4 effective el add-on, 7 db	Δ	34.99
0A-28 10m horizontal omni antenna		74.99
0A-50 6m horizontal omni antenna		63.99
SK-50 Stacking harness for 0A-50		36.99
0A-144 2m horizontal omni antenna		54.99
SK-144 Stacking harness for 0A-144		34.99
0A-222 220 horizontal omni antenna		54.99
SK-222 Stacking harness for 0A-222		34.99
0A-432 430 horizontal omni antenna		54.99
SK-432 Type N stacking harness; 0A-432		54.99
UHF0N450 440 dual band notch filter		62.99
VHF0N152 2m dual band notch filter		62.99
VHF0N152HT 2m dual band HT notch filter ..		68.99
VHFTN152-158 2m dual band+pager notch filt ..		82.99
UHF-12 12" RG58/silver/gold/tef PL259s ..		9.99

PENETROX (PEN)

Penetrox A 4 oz tube for antennas		\$ 12.99
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PHILIPS (PHI)

U-105 Light duty rotor/4-wire		\$ 69.99
TB-105 Thrust bearing		18.99

PIPO TOUCH-TONE PADS (PIP)

PK-1 12-digit pad		\$ 71.99
PK-1K 12-digit pad w/delay relay		78.99
PK-1M 12-digit pad for surface mtg	Δ	49.99
PK-2 16-digit pad		76.99
PK-2K 16-digit pad w/delay relay		83.99
PK-2M 16-digit pad for surface mtg		76.99

POLICE CALL (POL)

CD-ROM 48 state scanner freqs CD-ROM		\$ 34.99
IL/IN/KY/WI Police Call Plus scanner freq book D		12.99
Vol 3/4 IL/IN/KY/MI/OH/WI scanner freq book		14.99

POLYPHASER (PLY)

LIGHTNING PROTECTION

IS-50NX-C2 125-1000 375/125/50w N flange		\$ 61.99
IS-50UX-C0 1.5-400 2kw/375/125w flange mt		61.99
IS-50UX-C1 50-700MHz 375/125w flange mt		61.99
IS-B50LN-C2 125-1000 375/125/50w N bulkhead		64.99
IS-B50LU-C0 1.5-400 2kw/375/125w bulkhead		64.99
IS-B50LU-C1 50-700 375/125w bulkhead mt		64.99
IS-IE50LU-C0 1.5-400 dtx 2kw/375/125w bulk		129.99
IS-IE50LU-C1 50-500 dtx 375/125w bulkhead		129.99
IS-IE50LN-C1 50-700 dtx 375/125w N bulkhead		117.99
BF Adapter Bulkhead to flange mt adapter ..		9.99
FB Adapter Flange to bulkhead mt adapter ..		11.99
IS-PLD0-120-15A 120v 15A power protector		172.99
IS-PLD0-120-20A 120v 20A power protector		215.99
IS-RCT 8-wire rotor control protector		54.99
J-1 1/2" to 1 1/8" bronze transition clamp ..		8.99
J-2 1 1/8" to 2 1/4" bronze transition clamp ..		12.99
IS-SPTL Single phone line protector		57.99
CS112-25 25' 1 1/2" copper strap		25.99
CS112-50 50' 1 1/2" copper strap		51.99
CS112-75 75' 1 1/2" copper strap		75.99
CS112-100 100' 1 1/2" copper strap		99.99
CS3-25 25' 3" copper strap		51.99
CS3-50 50' 3" copper strap		99.99
CS3-75 75' 3" copper strap		149.99
CS3-100 100' 3" copper strap		197.99
CS6-25 25' 6" copper strap	Δ	79.99

Polyphaser - continued AES Price

CS6-50 50' 6" copper strap	Δ	149.99
CS6-75 75' 6" copper strap	Δ	219.99
CS6-100 100' 6" copper strap	Δ	279.99
CU-SPGP Copper single point ground panel ..		69.99
TK-2 1 1/2" strap to Rohn twr corrosion free clamp		5.99
TK-3 1 1/2" strap-2 1/4" to 3 3/4" mast corr free clamp		8.99
1C-112S #6-#1 wire to 1 1/2" strap clamp bond		10.99
58R-112S 1 1/2" strap to 3/8" gnd rod clamp bond		12.99
MSC-3 Junc; 2+ 1 1/2" or 3" strap clamp bond		10.99
UNI-KIT 2CT Gnd kit; coax to alum/tin/galv ..		29.99
UNI-KIT 2TC Gnd kit; galv twr leg to copper ..		32.99
UNI-KIT 2CC Ground kit; coax to copper		28.99
CCK Copper cleaning kit; 4 oz can, brush		27.99
GLEP Lightning and EMP Protection book		20.00

The POUCH (POU)

1R Pouch for Yaesu VX-1R		\$ 12.99
2G Pouch for Icom IC-2GXAT	Δ	14.99
2-411 Pouch for Yaesu FT-411 Mk II/12		17.99
5R Pouch for Yaesu VX-5R		14.99
10R/10-50 Pouch; Yaesu FT-10/40/50RD		14.99
23-33 Pouch for Yaesu FT-23/33R		17.99
32-5T Pouch; Alinco DJ-G5T/Icom IC-W32A ..		14.99
95T Pouch for Alinco DJ-195T		14.99
110-150 Pouch for Yaesu VX-110/150		17.99
508 Pouch; Ico Q7ABC/Sta108/508/Yae VR500		12.99
510 Pouch; Ali DJ-X2T; Ico T8A/T81A/Sta 510A		12.99
AF-738 Pouch for Alinco DJ-C1T/C4T/C5T		12.99
ANALYPOUCH Pouch for MFJ analyzer		24.99
DTX Pouch for Kenwood TH-D7A		17.99
G-71 Pouch for Kenwood TH-G71A		17.99
P-4V Pouch for UBZ-LF14 FRS	Δ	14.99
P-5 Pouch; DJS11T/S46/ICT7H/T22A/FT11R ..		14.99
PR Pouch for ADI PR-52/222		14.99
RC-3 Pouch for Icom R-3/R-10		17.99
S-1 Pouch; AT-201HP/AT-600HP/TH-79A		17.99
S-2 Pouch; TH-79AH/TH-235A/VC-H1		17.99
S-3 Short 3 Pouch for HT	D	12.99
Slim Pouch; Alinco DJ-190/191T/Sta C-288A		17.99
SS Pouch for TH22AT/TH28A/FT51R&HP		17.99
T-2A Pouch; AT-201/600/Chr AH-50/IC-T2H ..		17.99
V-5T Pouch for Alinco DJ-V5T		14.99
VX-3T Pouch for Alinco DJ-180/280/480T		14.99
XF-1 Pouch for Yaesu VXF-1/VXF-10 FRS	D	9.99
Chest B/S Chestpouch ser B w/S pocket		29.99

PREMIER (PRE)

AL-800 2m/440 34" BNC rubber duck ant		\$ 29.99
RD-2 2m/440 2" BNC duck		14.99
RD-2SMA 2m/440 2" SMA duck		15.99
RD-8 2m/440 6.5" BNC duck		14.99
RD-9 2m/440/900 7" BNC duck		18.99
RD-9SMA 2m/440/900 7" SMA duck		20.99
RD-78 2m/440 15" BNC whip		19.99
RD-98 2m/440 17" BNC whip		24.99
RD-98SMA 2m/440 17" SMA whip		27.99
MC-2 Super suction & mag mt; NMO/UHF		29.99
SB-752 12vdc 6.5A port batt power pack	D	49.99
TA-2 Hvy dty rubber coat tnk mt; NMO/UHF	D	9.99
TX-3 2m/440/900-1.2 800/800/200w triplexer D		9.99
SPM-100 Spkr/mic; ADI/Alinco/Yaesu		21.99
SPM-100L Spkr/mic/L plug; Icom/Yaesu		21.99
SPM-101 Speaker/mic for Kenwood		21.99
SPM-102 Speaker/mic; Yae FT-50/VX1/5R		21.99
SPM-200 Lapel mic/earph; ADI/Alinco/Yae ..		16.99
SPM-200L Lapel mic/earph/L; Icom/Yaesu		16.99
SPM-200E Lapel mic/earhook; ADI/Alinco/Yae		21.99
SPM-200EL Lapel mic/earhook/L; Ico/Yae		21.99
SPM-201 Lapel mic/earphone for Kenwood ..		18.99
SPM-201E Lapel mic/earhook for Kenwood ..		23.99
SPM-202 Lapel mic/earhook; FT-50/VX1/5R		19.99
SPM-202E Lapel mic/earhook; FT-50/VX1/5R		25.99
SPM-301 Spkr/mic/PTT lock/volume; Ken	D	14.99

Premier - continued AES Price

SPM-400 Boom/mic; ADI/Alinco/Icom/Yaesu ..		25.99
SPM-400L Boom/mic/L; Icom/Yaesu		25.99
SPM-401 Boom/mic for Kenwood		27.99
SPM-402 Boom/mic; Yaesu FT-50R/VX1R/5R		29.99
PTT-1 Remote PTT control; SPM-400 series		9.99
SPM-400PT Boom/mic/PTT-1; ADI/Alinco/Ico/Yae		29.99
SPM-400LPT Boom/mic/L/PTT-1; Icom/Yaesu		29.99
SPM-401PT Boom/mic/PTT-1 for Kenwood		30.99
SPM-402PT Bm/mic/PTT-1; Yae FT50R/VX1/5R		32.99
SPM-500 Throat/mic/earph; ADI/Alinco/Ico/Yae ..		37.99
SPM-501 Throat/mic/earphone for Kenwood ..		39.99
SPM-502 Throat/mic/earphone; Yae FT-50/VX1/5R		40.99
SPM-600 Full sized spkr/mic; ADI/Alinco/Yae		25.99
SPM-600L Full sized spkr/mic/L; Icom/Yaesu		25.99
SPM-601 Full sized spkr/mic for Kenwood		25.99
SPM-602 Full sized spkr/mic; FT50/VX1/5R		25.99
SPM-700 Palm mic w/earph; ADI/Alinco/Yae		29.99
SPM-701 Palm mic w/earphone for Kenwood		31.99
SPM-702 Palm mic w/earphone; FT50/VX1/5R		33.99
EH-1 Deluxe earphone w/earhook		14.99
EH-1K Deluxe earphone w/earhook; Kenwood		14.99
MMC-100 Sun visor mobile mic system		79.99
PMC-100 Base station microphone system		79.99
PMC-200 Deluxe base station mic system		119.99
PCA-IHF Cable/8-pin; Icom HF		15.99
PCA-IVHF Cable/RJ-45; Icom VHF		15.99
PCA-KHF Cable/8-pin; Alinco/Kenwood HF		15.99
PCA-YVHF Cable/RJ-45; ADI/Alinco/Kenwood HF		15.99
PCA-YHF Cable/8-pin; Yaesu HF		15.99
PCA-YVHF Cable/RJ-45; Yaesu VHF		15.99
PCA-Y100 Cable; Yaesu FT90/100/2600		15.99

PRO AM by VALOR (VAL)

VHF/UHF ANTENNAS ONLY (No Mounts)

M0144-440 2m/440 antenna		\$ 21.99
PAQA 136-515 MHz 1/4 wave antenna		8.99
PAQ-144 2m 1/4 wave antenna	D	8.99
PAQ-435 440 1/4 wave antenna	D	8.99
PAQ-3820 2m 1/4 wave whip w/ 3/4-24 thread ..		8.99
PHB-144 2m 1/4 wave 3 db antenna		31.99

MOUNTS ONLY FOR ABOVE ANTENNAS

PAM Low profile magnet mount w/coax		\$ 28.99
PAMB Black low profile mag mount w/coax ..		28.99
PAN38 3/8-24 antenna to NMO mt adapter		19.99
PAS 3/8" surface mount w/coax		20.99
PASMO 3/8" surface mt only (no coax)		7.99
PAS38 3/8" surface mount w/coax		20.99
PAS38MO 3/8" surface mt only (no coax)		7.99
PAT-2 No hole trunk mount w/coax		27.99
PAT-2B Black no hole trunk mount w/coax		27.99
PAT-3 Swivel NMO-style trunk mt w/coax		35.99

OTHER VHF/UHF ANTENNAS & MOUNTS

77BNC 2m/440 10" 0/2.1db BNC duck	D	\$ 19.99
220BNC 220 10" 1/4 wave duck w/BNC	D	9.99
BNC-SC Suction cup extension; ducks	D	19.99
BNC-SC-RS Suction cup extension; ducks		22.99
WMSL-BNC Window clip for rubber ducks D		29.99
100ADN SO-239 horizontal mirror mt		10.99
101ADN HD alum mirror mt w/SO-239		10.99
105AD Hvy duty 3/8" mount assembly		6.99
301 3/4-24 magnet mt only w/coax		25.99
401 Low profile 3/4-24 mag mt only w/coax ..		31.99
DAK Mt for 2 vert ants or horizontal dipole ..		13.99
GM-100AD SS GM 3/4-24 mirror mt w/SO-239 ..		9.99
GM-144 2m 2.5db on glass antenna		44.99
GM-270 2m/440 2.6/6.3db on glass antenna		59.99
TGMKD On glass replacement mtg kit		8.99
MM-3401 Maxi-mag mt 3/4-24 kit (3-5" mags)		59.99
MM-3401B Blk maxi-mag mt 3/4-24 kit (3-5" mags)		59.99
SS-100MOT 3-way NMO mirror mt w/coax		23.99
CX-144 2m 3db 3/4-24 whip		17.99
MM-270B 2m/440 mini mag mt ant w/BNC ..		49.99
PA-440M 440 22" 4db mag mt ant	D	9.99



Pro Am - continued**AES Price**

PAQM 144-450 MHz 1/4 wave BNC mag ant ..D	28.99
PM-144-440BN 2m/440 BNC mag mt ant	33.99
TGS 30-1200MHz on-glass scanner ant	39.99
VAA-002B 144-450 black 1/4 wv mag mt ant ..	23.99
VAA-002BBN 144-450 black 1/4 wv BNC mag ant	27.99
120 Sawtooth hump mt for mobile radios	7.99
D-270 2m/440 100w duplexer	39.99

MOBILE HF ANTENNAS (No Mounts)

AB-5 75/40/20/15/10m antenna	\$119.99
PHF-160 160m 8' 1/4-24 whip	97.99
PHF-75 75m 8' 1/4-24 whip (4' coil, 4' whip) ..	29.99
PHF-40 40m 8' 1/4-24 whip (4' coil, 4' whip) ..	23.99
PHF-30 30m 8' 1/4-24 whip (4' coil, 4' whip) ..	23.99
PHF-20 20m 8' 1/4-24 whip (4' coil, 4' whip) ..	23.99
PHF-17 17m 8' 1/4-24 whip (4' coil, 4' whip) ..	23.99
PHF-15 15m 8' 1/4-24 whip (4' coil, 4' whip) ..	23.99
PHF-12 12m 8' 1/4-24 whip (4' coil, 4' whip) ..	23.99
PHF-10 10m 8' 1/4-24 whip (4' coil, 4' whip) ..	23.99
PHF-6 6m 58" 1/4-24 whip	23.99
103S Quick disconnect/5 twist lock connectors	24.99

QSL Card Holders (ART)

QSL Card Holders, pack of 3, 20 cards/holder	\$12.99
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RCA (DSI)

DS-4120 Single DBS system/dish/rcvr/LNB ...	\$89.99
DS-4240RE Dual DBS sys/dish/rcvr/dual LNB	179.99
DS-4280 Dlx dual DBS system/Dolby/dual LNB	279.99
108 F-56 connector with O-ring	.79
5729 RG-6 double shielded coax	per ft. .19
5729 Box	1000 ft. Roll 99.99
ACAC-5960 Deluxe crimp tool for RG-6/RG-59	19.99
D-913 12' S-video cable	10.99
DKIT-1 DBS installation kit	49.99
DLNB-1 DBS single LNB	59.99
DLNB-2 DBS dual LNB	69.99
DRD-420RE Slave DBS receiver	79.99
DRD-480 Deluxe DBS slave receiver	199.99
CDS-1000 Digital still camera w/2MB memory	169.99
RD-2204 Lyra personal digital audio player w/car kit	229.99

Sorry, no exports on RCA DBS products.

RF APPLICATIONS (RFA)

P-1500 1.8-30 MHz dig power/SWR meter ..D	\$149.99
P-1500-P Power supply for P-1500	9.99
P-2000A 1.8-30 MHz dig power/SWR meter ..	299.99
P-2000CW 1.8-30 MHz audible (CW) meter ..D	189.99
P-3000 Deluxe 1.8-30MHz digital power/SWR	299.99
P-3000-P Power supply for P-3000, etc. ...	12.99
VFD-HF 1.8-30 MHz 2955w dig power/SWR ..	249.99
VFD-VHF 50-225 Mhz 300w dig power/SWR ..	249.99
Match Alert VSWR monitor/alarm	99.99

RF CONCEPTS (RFC)

2-23 2m FM/SSB 2/30w amp/preamp	D \$69.99
2/70 2m/440 FM 3/30/55/20w HT amp	D 129.99
144P 2m FM mini-amp 2/30w amp/preamp ..	89.99
VHF1-60 2m 1/60w FM HT amplifier	D 119.99

RF INQUIRY (RFI)

CF250E-UHF 250w 1.8-70 common mode filter	\$89.99
CF5KV-UHF 5kw 1.8-70 common mode filter	124.99

RF LIMITED (RFL)

HL-36U 440 .5-12/30w amplifier	Δ \$99.99
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RF PARTS (See Diamond)**RF PRODUCTS (RFP)**

199-416 BNC mag mt, 10' coax w/BNC	\$17.99
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RACOM (RCO)

700 Automatic morse code identifier	Δ \$39.99
700-PC Programming kit	6.99

AES Price**Radio Am Callbook (RAC)**

077969 2001 World Radio TV Handbook	\$24.95
087603 2001 N America/Int CD-ROM callbook	49.99

RADIO PUBLICATIONS

087034 All About Cubical Quad Antennas	\$13.95
087042 Beam Antenna Handbook	13.95
087050 All About VHF Amateur Radio	13.95
087069 Radio Amateur Antenna Handbook ..	13.95
087077 Simple, Low Cost Wire Antennas	13.95
087093 Interference Handbook	13.95
087107 All About Vertical Antennas	13.95

RAMSEY (RAM)

AA-7 Active antenna kit	\$28.99
AF-1 Hi-Q CW audio filter kit	Δ 24.99
AR-1 Aircraft receiver kit	29.99
CS-1 Crystal radio set kit	19.99
CW-7 CMOS keyer kit	24.99
DF-1 Foxhound direction finder kit	59.99
DN-1 Nicad conditioner/fast charger kit Δ	34.99
FR-1 FM broadcast receiver kit	24.99
HR-20 20m receiver kit	29.99
HR-40 40m receiver kit	29.99
HR-80 80m receiver kit	29.99
PR-10 2m preamp kit	17.99
QRP-20 20m CW transmitter kit	29.99
QRP-40 40m CW transmitter kit	29.99
QRP-80 80m CW transmitter kit	29.99
RFS-1 RF sensed switch kit	14.99
SCA-1 SCA decoder kit	27.99
SR-1 Shortwave receiver kit	29.99
TS-1 CW touch paddle switch kit	6.99
UT-5 Universal timer kit	8.99
VS-1 Voice activated switch kit	6.99
WA-10 BNC telescopic whip antenna	Δ 9.99

RANGER (RAN)

LC-1000 Leather case; RCI-1000 VHF HT ...Δ	\$2.99
SRA-106A Speaker/mic; RCI-1000 VHF HT ..D	4.99
SRA-107 Speaker/mic; RCI-1000 VHF HT ...Δ	14.99
RCI-2950DX 10/12m 25w SSB 10w FM/AM/CW	249.99
RCI-2970DX 10/12m 150w SSB 50w FM/AM/CW	369.99

ROHN TOWERS (ROH)

HBX-40/BXB-6 40' twr/base stubs, 10 sq ft *T	\$490.99
HBX-48/BXB-7 48' twr/base stubs, 10 sq ft *T	653.99
HBX-56/BXB-8 56' twr/base stubs, 10 sq ft *T	820.99
HDBX-40/BXB-7 40' twr/base stubs, 18 sq ft ΔT	499.99
HDBX-48/BXB-8 48' twr/base stubs, 18 sq ft *T	816.99

*Drop-shipped from factory

On factory drop-shippings we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB the Rohn factory, which has various locations, via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these drop-shipped towers. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

Note: Rohn states that "antennas developing a large twisting moment due to wind must not be used on HBX/HDBX-series towers. Antennas should be limited to those having a maximum boom length of 10 ft.

Other Rohn Towers available on Special Order

SGC (SGC)

04-01 SG-2000 150w 1.8-30 MHz 12v Xcvr	1599.99
04-06 SG-2000 Slim Pack Xcvr (no head) ...	1339.99
04-11 Std SG-2000 rem head/bkt/20' cable	589.99
04-15 Remote mobile head/mem ch's only	399.99
51-82 Fan kit for continuous duty xmit	269.99
04-10 SG-2000 Xcvr w/DSP/PowerTalk head ..	1849.99
04-23 SG-2000 Xcvr/DSP/PowerTalk remotd	2179.99

SGC - continued**AES Price**

04-12 Remote kit w/swivel bkt & cable	179.99
04-13 Remote kit w/5-way mt & cable	Δ 269.99
04-14 Rem kit w/suction cup mt & cable	449.99
04-22 PowerTalk remote head	799.99
52-31 Waterproof military handset	Δ 289.99
52-32 Carbon telephone handset	Δ 149.99
52-34 RS-232 interface; SG-2000 Xcvr	179.99
52-47 Shock/military mounting tray	Δ 229.99
52-51 CA-1 High voltage feed wire ..per ft.	.79
52-52 CA-2 RG-58 coax cable	per ft. .99
52-53 CA-230 Ant coupler cbl; custom per ft.	4.99
52-54 CA-2000 Rem head cbl; custom per ft.	4.99
53-04 PS-30 30A/40A peak unreg ps	399.99
53-05 PS-50 50A/70A peak unreg ps	419.99
52-61 PSC/12-1 12' ps cable, 1 plug	50.99
52-62 PSC/12-2 12' ps cable, 2 plugs ..	60.99
05-01 SG-2020 Mini 20w PEP QRP Xcvr/mic	675.99
52-96 SG-500 1.8-24MHz 12v 500w PEP amp	1169.99
51-82 Fan kit for continuous duty xmit	269.99
56-40 SG-7200 DSP HF Smartmodem/Emailer	695.99
70-07 PowerClear add-on DSP unit	D 299.99
54-14 SG-230 200w 1.8-30 MHz 12v Smartuner	489.99
54-61 25' extension cable	60.99
54-62 50' extension cable	90.99
54-63 SmartLock; tuners made after 9/1/93	59.99
54-15 SG-235 500w 1.8-30MHz 12v Smartuner	1169.99
54-16 SmartPro 200w 1.6-30MHz 12v tuner D	499.99
54-17 SG-231 HF+6m 12v Smartuner	529.99
54-18 SG-237 100w PEP HF+6m mini Smartuner	339.99
55-04 SG-103 1.8-30MHz 150w dipole	229.99
55-06 SG-104 2-28 MHz 90' 1kw dipole	629.99
55-27 SG-303 1.8-30 9' mobile whip & mt ..	449.99
55-67 Replacement whip for SG-303	249.99
55-28 SG-307 1.8-60 7' mobile whip & mt ..	319.99
55-47 QMS-2 Quick mt sys w/SG-230/303 whip	895.99
55-48 QMS-3 500w antenna system	2169.99
55-49 QMS-7 Quick mt sys w/SG-231/307 whip	1249.99

SANGEAN (SAN)

ATS-303 AM/FM/shortwave port receiver	D \$69.99
ATS-404 AM/FM/SW portable receiver w/case †	89.99
ATS-505 AM/FM/SW portable receiver	129.99
ATS-606A AM/FM/shortwave portable receiver	149.99
ATS-818 AM/FM/shortwave portable receiver	179.99
ATS-818CS AM/FM/SW port Rcvr w/cassette ..	229.99
ATS-909 AM/FM/shortwave portable receiver	269.99
DT-200V AM/FM/VHF TV sound dig port Rcvr	69.99
SR-77 AM/FM micro sized receiver	D 19.99

SEQUOIA (SEQ)

POCKET PC REF Pocket PC reference book ...	\$14.99
POCKET REF Pocket reference book	9.99
WinRef 98-95 Windows pocket reference book	9.99

SHAKESPEARE (SHA)

5220 8' Galaxy Loran C whip	Δ \$6.99
5221 8' black Galaxy Loran C whip	Δ 6.99
5302 8' VHF marine/Loran combo ant	Δ 29.99
396-1 3 db, 5' VHF marine ant, less mount ..	59.99
5101 6 db, 8' VHF marine ant, less mount ...	49.99
5202 6db VHF mar ant/chrome ferrule, less mt	69.99
5206-C Econo 8' VHF mar ant/chrome ferrule, no mt	39.99
495 White plastic lift & lay mount	16.99
4187 Stainless steel ratchet mount	36.99
420 3db, 5' VHF marine ant w/fold-down mt	59.99

SHURE (SHU)

526T Series II Dynamic amplified desk mic ..	\$119.99
R96 Replacement cartridge	26.99

Smiley Antenna (SMI)

270A 2m/440 gain telescopic whip	\$19.99
270A/SMA 2m/440 gain tele whip w/SMA	19.99
5/8 SLD-2 2m 1/2 Slim Duck rubber ant	17.99
5/8 SLD-220 220 1/2 Slim Duck rubber ant	17.99



Smiley - continued

	AES Price
5/8 SLD-440 440 % Slim Duck rubber ant	17.99
5/8 SLD-2 Combo 2m % duck & stubby ant ..	24.99
5/8 SLD-220 Combo 220 % duck & stubby ant ..	24.99
5/8 SLD-440 Combo 440 % duck & stubby ant ..	24.99
FLX 1/2 WAV-2M 1/2 wv 2m BNC whip/flex coil	25.99
RD-2 2m rubber duck antenna	14.99
RD-220 220 rubber duck antenna	14.99
RDMD-2 2m mini rubber duck antenna	14.99
RDMD-220 220 mini rubber duck antenna ...	14.99
RDMD-440 440 mini rubber duck antenna ...	14.99
RDS-2 2m stubby rubber duck antenna	14.99
RDS-220 220 stubby rubber duck antenna ...	14.99
RDS-440 440 stubby rubber duck antenna ...	14.99
SD-2 2m Slim Duck thin rubber antenna	14.99
SD-220 220 Slim Duck thin rubber antenna ..	14.99
SL-440 440 slimline type duck	12.99
SS-II Super Stick 2m % wv telescopic ant	19.99
SS-III Super Stick 220 % wv telescopic ant ..	19.99
SS-IV Super Stick 440 % wv telescopic ant ...	19.99
SS-II/Combo 2m % wv telescopic & stubby ant	26.99
SS-III/Combo 220 % wv telescopic & stubby ant	26.99
SS-IV/Combo 440 % wv telescopic & stubby ant	26.99
TAQ-2 2m 1/4 wave stainless whip	10.99
TAQ-220 220 1/4 wave stainless whip	10.99
TAQ-440 440 1/4 wave stainless whip	10.99
TS Thin Stick 2m/220 % wave telescopic whip	16.99

SOLARCON (SOL)

A-99 10m/CB fiberglass base station ant	\$ 64.99
GPK-1 Ground plane radial kit	39.99

SOLDER-IT (SLD)

ALP-21D Alum solder paste, 7.1gm	\$.49
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SONY (SON)

RFU-W100 RF adaptor for WebTV	\$ 1.99
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SHORTWAVE/SCANNERS

ICF-2010 AM/FM/SW/LW/air port Rcvr w/ps ..	\$359.99
ICF-SW07 AM/FM/SW micro Rcvr w/ps	399.99
ICF-SW11 AM/FM/SW compact receiver	49.99
ICF-SW12 AM/FM/SW travel Rcvr/world clock ...	99.99
ICF-SW30 AM/FM/SW portable receiver	79.99
ICF-SW35 AM/FM/SW portable receiver	89.99
ICF-SW40 AM/FM/SW port receiver	129.99
ICF-SW77 AM/FM/SW portable receiver	469.99
ICF-SW100S AM/FM/SW portable receiver	349.99
ICF-SW1000T AM/FM/SW port Rcvr w/cassette	469.99
ICF-SW1000TS AM/FM/SW Rcvr/tape/AN-LP1 D	399.99
ICF-SW7600G AM/FM/SW portable receiver ..	179.99
AC-E60HG 6vdc 400ma AC adapter	22.99
AN-1 LW/MW/SW outdoor active rcv ant	99.99
AN-102 LW/MW/SW indoor active rcv ant	79.99
AN-LP1 Folding active loop ant w/case	89.99
ICF-SC1 300 ch pocket scanner	179.99
AC-E60HG 6vdc 400ma AC adapter	22.99
DCC-E260 Mobile DC adapter	19.99
ICF-B200 AM/FM emergency radio/light/alarm Δ	59.99

STANDARD (STA)

C-178A 2m/440 FM mini HT/TTP	\$249.99
CAW-574 13' fnt panel extension cbl; 5718DA Δ	9.99
CHP-150 Headset mic w/VOX	39.99
CLC-171 Soft case for CNB-171	4.99
CLC-172 Soft case for CNB-172/173	4.99
CLC-175 Soft case for CBT-175	4.99
CTN-5600 Encoder/decoder; C-5608DA	19.99

STARTEK (STR)

APA-9/VPA-9 9vdc auto power adapter	\$ 2.99
BP-150 130 - 500 MHz bandpass filter	29.99
CAM-PHA-AES B&W pinhole TV cam/mic/ps ..D	69.99
CC-90 Carrying case	7.99
DC-5 BNC to clip leads cable	5.99
DC-10 Direct probe	9.99
HP-400 400 - 1500 MHz bandpass filter ...Δ	29.99

Startek - continued

	AES Price
HP-800 800 MHz - 2 GHz bandpass filter ...Δ	29.99
LP-22 Lo-pass probe	6.99
LP-60 DC - 60 MHz bandpass filter	29.99
M-207-IC Interface cable	2.99
P-60 Probe, 60MHz scope, 200MHz FC	6.99
P-100 Probe, 100MHz scope, 300MHz FC	9.99
P-110 Probe, 200MHz scope, 500 MHz FC ...Δ	19.99
RD-800 800MHz rubber duck antenna	7.99
RD-2750 27-50MHz rubber duck ant	9.99
TA-90 Telescopic antenna	7.99
TA-90L Right angle telescopic antenna ...Δ	9.99

SUPERIOR (SUP)

18640 Universal grip-type adjustable HT cradle	\$ 14.99
(HOU) CPM-310 6" adjustable pedestal mt ..	14.99

SVETLANA (SVE)

4CX250B/7203 Tube	special order \$105.99
4CX400A Tube	special order 140.99
4CX800A Tube	special order 190.99
572B Tube	86.99
8874/3CX400A7 Tube	special order 335.99

Other Tubes Available on Special Order

Synthetic Textiles (SYN)

100' 3/8" black double braided rope	\$ 6.99
100' 3/16 3/8" black double braided rope	14.99
100' 5/16 3/8" black double braided rope	19.99
350' 3/8" black double braided rope	39.99

TE SYSTEMS (TES)

0510G 6m FM/SSB 10/170w amp/preamp	\$319.99
0552G 6m FM/SSB 20-25/375w amp/preamp ..	486.99
1410G 2m FM/SSB 5-10/160w amp/preamp	328.99
1412G 2m FM/SSB 25-45/160w amp/preamp ..	286.99
1452G 2m FM/SSB 10-25/350w amp/preamp ..	525.99
2212G 220 FM/SSB 25-45/130w amp/preamp ..	316.99
4412G 440 FM/SSB 15-30/100w amp/preamp ..	355.99
4452G 440 FM/SSB 25/185w amp/preamp ...	547.99

TV ALLOWANCE (MIN)

100 TV Allowance TV/video time manager	\$ 99.99
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TV GUARDIAN (TVG)

TV Guardian Foul language filter for TV/video	\$ 99.99
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Terk Technologies (TER)

AF-9330 Amplified indoor AM/FM tower ant ..	\$ 24.99
AF-9925 Amplified indoor AM/FM loop ant	49.99
AM-1000 Indoor passive fine-tunable AM ant	49.99
FM-50 Amplified indoor/outdoor FM ant kit	99.99
LF-20 2.4GHz wireless video/audio system ...	99.99
TV-50 Amplified indoor/outdoor TV ant kit	99.99
TV-MAST Mast mount kit for TV-50	19.99
TV-41 Clip-on mini dish mt amp TV ant; 1 LNB dish	59.99
TV-42 Clip-on mini dish mt amp TV ant; 2 LNB dish	79.99

Texas Bugcatcher (TEX)

BG-1500 80-10m 90" mobile ant	\$169.99
ADAPT-6M 6m adapter for BG-1500	14.99
BM-EXT 24" stainless mast extension/guy kit D	24.99
CC-4 Package of 4 coil clips	7.99
MM-1 Inductive mobile matcher	24.99

Times Microwave (TMS)

LMR-400 Standard 3/8" coax cable	per ft. \$.64
LMR-400	500 ft. Roll 249.99
LMR-400-DB Watertight 3/8" coax cable per ft.	.74
LMR-400-DB	500 ft. Roll 299.99
LMR-400-UF UltraFlex 3/8" coax cable	per ft. .98
LMR-400-UF	500 ft. Roll 399.99

TIMEWAVE/AEA

TIMEWAVE (TIM)

DSP-599zx All-mode DSP noise filter	\$399.99
(AEA) AC-4 12vdc 1.5A ps	19.99
DSP-RTTY RTTY prog; DSP-599zx/59Y	69.99

Timewave - continued

	AES Price
ANC-4 RF noise canceller	199.99
TIMEWAVE/AEA DATA/SOFTWARE (AEA)	
PK-12 1200 bps VHF/UHF pkt controller	\$129.99
100K/PK-12 100K mail upgrade; PK12 ...D	9.99
AC-1 12vdc 600 ma adaptor	15.99
100K 100K mem upgrade; PK-96	14.99
PK-96/100K 9600 baud control/128K RAM	169.99
AC-1 12vdc 600 ma adaptor	15.99
PC Pakratt Lite Packet only term prog D	2.99
PK-232/DSP Packet controller w/DSP	450.99
AC-4 12vdc 1.5A ps	19.99
ACARS/900 Air data receive soft; PK-900 ...D	29.99
AEA-FAX III-900 PK900/IBM FAX software ..D	29.99
PC-Pakratt for Win 2.0 IBM; 12/88/232	79.99
PK-TERM 99 Terminal prog; PK-12/96/232 ..	79.99
WeFax-256 WX FAX Win prog; 1232/2232 ...D	79.99
YM CABLE PK-232 - Yae 8pin mic cable D	4.99
AA.COM SWR curve IBM soft; 121 & V/U ...D	2.99
DM-1 2m/220/440 FM deviation meter	169.99
Ham University Written/code Win soft w/exam	39.99
IDR-96 5w 441.05MHz data Xcv/9600	249.99
Morse University II Code/written Win soft w/exam D	29.99

TRIPP LITE (TRI)

PR-7 5A power supply, 7A surge	\$ 34.99
PR-12 9A power supply, 12A surge	49.99
PV-140 140w 12vdc-115vac inverter	47.99
PV-300 300w 12vdc-115vac inverter	72.99
TL-11 Trim Line small low prof 8A ps	24.99
TLC-11 Trim Line large low prof 8A ps	24.99
ISOBAR-4 4 outlet premium surge suppressor Δ	34.99
ISOBAR-6 6 outlet premium surge suppressor Δ	39.99
ISOBAR-8 ULTRA 8 outlet surge suppress/LEDs	79.99
MT-6+ 6 outlet console surge suppressor ...Δ	59.99
SUPER-7 7 outlet surge suppressor	19.99
SUPER-7+TEL 7 outlet/fax modem surge	29.99
TR-6 Surge Alert 6 out super suppressor ...Δ	14.99
TR-6FM Surge Alert+Tel 6 out super suppress Δ	24.99

TUBES (TUB)

6146W Tube	\$ 26.99
12BY7A Tube	12.99
3-500G High dissipation tube (3-500Z)	119.99
3-500Z	229.99
572B Tube	49.99
811A Tube	19.99

Also see SVETLANA

TUNE BELT (TUN)

HH-1PL Up to 7" HT radio belt	\$ 2.99
HH-1PS Up to 5" HT radio belt	2.99
HH-2PM To 6" HT radio belt/batt pocket ...Δ	4.99

US TOWER (UST)

FREE STANDING CRANK-UPS (not for T'X)

TX-438 38' crank-up tower	T 1142.99
TX-455 55' crank-up tower	T 1699.99
TX-472 72' crank-up tower	T 2832.99
TX-472MDP 72' crank-up w/motor drive T	4549.99
TX-489MDPL 89' crank-up w/motor drive ...T	7390.99
TX-3106MDPLSP 106' crank-up/mot drive .T	11699.99

FREE STANDING HD CRANK-UP TOWERS

HDX-538 38' crank-up tower	T 1477.99
HDX-555 55' crank-up tower	T 2569.99
HDX-572MDPL 72' crank-up w/motor drive .T	6775.99
HDX-589MDPL 89' crank-up w/motor drive .T	8869.99
HDX-689MDPL 89' HD crank-up w/motor T	17135.99
HDX-5106MDPL 106' HD crank-up w/motor T	18647.99

COMPACT TMM (Top mt rotor for full retraction)

TMM-433SS 33' crank-up tower	T 1219.99
TMM-433HD 33' HD crank-up tower	T 1477.99
TMM-541SS 41' crank-up tower	T 1599.99

ACCESSORIES FOR CRANK-UP TOWERS

CX-2 Coax arms (2) for 2-section tower	\$ 55.99
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US Tower - continued

AES Price

CX-3	Coax arms (3) for 3-section tower	77.99
CX-4	Coax arms (4) for 4-section tower	122.99
CX-5	Coax arms (5) for 5-section tower	150.99
CX-6	Coax arms (6) for 6-section tower	190.99
HDP	Service platform	T 813.99
STS-4	Rotor accessory for TX/TMM towers	T 211.99
IV-16	Inverted vee arm for MA's	41.99
M-5	2" OD 5' mast extension for MA's	40.99
M-10	2" OD 10' mast	T 77.99
M-15	2" OD 15' mast	T 115.99
M-20	2" OD 20' mast	T 136.99
M-15R	2" OD 15' reinforced mast	T 156.99
M-20R	2" OD 20' reinforced mast	T 207.99
CM-20	2" OD 20' cromolly mast	T 489.99
MD-75	Heavy duty 1 HP motor drive	T 997.99
MDP-750*	Pull-down drive; TX-472/HDX-555 T	1551.99
MDPL-1000*	Pull-down drive; HDX-572	T 2106.99
*Requires MCL-100 or RMC-1000 also		
MRF	Mast raising fixture	268.99
MCL-100	Limit switch package	465.99
RMC-1000	Remote control w/limit switch	997.99
RP-3	Rotor plate for 10" section	39.99
RP-4	Rotor plate for 12 1/2" section	47.99
RP-5	Rotor plate for 15" section	52.99
TRX-80	Raising fixture; TX-438/455; HDX-538/555 T	434.99
TRX-80HD	Raising fixture; TX-472/489; HDX-572/589 T	571.99
TRX-100HD	Raising fixture; HDX-689/5106 T	805.99
TB-2US	Thrust bearing; 2" mast w/2 flange holes	110.99

MA-SERIES TUBULAR TOWERS

MA-40	40' crank-up mast	T \$899.99
MA-550	55' crank-up mast	T 1499.99
MA-550MDP	55' crank-up mast w/motor	T 2932.99
MA-770	70' crank-up mast	T 2529.99
MA-770MDP	70' crank up mast w/motor	T 3999.99
MA-850	85' crank-up mast	T 3909.99
MA-850MDP	85' crank-up mast w/motor	T 5391.99

MA-SERIES ACCESSORIES

CX-2M	Coax arms (2) for MA-40	\$ 59.99
CX-3M	Coax arms (3) for MA-550	88.99
CX-4M	Coax arms (4) for MA-770	133.99
CX-5M	Coax arms (5) for MA-850	160.99
MAB-40	Hinged base for MA-40	T 361.99
MAB-550	Hinged base for MA-550	T 432.99
MAB-770	Hinged base for MA-770	T 522.99
MAB-850	Hinged base for MA-850	T 633.99
MAF-40	Raising fixture for MA-40	221.99
MAF-550	Raising fixture for MA-550	T 306.99
MAF-770	Raising fixture for MA-770	T 311.99
MAF-850	Raising fixture for MA-850	T 412.99
MARB-40	Rotor base accessory for MA-40	T 553.99
MARB-550	Rotor base accessory for MA-550	T 654.99
MARB-770	Rotor base accessory for MA-770	T 774.99
MARB-850	Rotor base accessory for MA-850	T 916.99

All US TOWER products are drop-shipped (shipped direct to you from the US TOWER factory). On these factory drop-shippments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Visalia, California via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order products. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

UNADILLA (See W2AU)

UNIDEN (UNI)

EXS-9110	900MHz dig spread spec cordless	D \$ 69.99
EXS-9960*	900MHz dig spread spec crdls/call ID	D 99.99

*\$20 consumer rebate from Uniden thru 12/31/00!

Uniden - continued

AES Price

EHD-1200GB	900MHz Harley black cordless	49.99
EXA-7950	900MHz cordless ph/dig ans mach	69.99
EXP-7902	900MHz cordless phone	39.99
EXS-9910*	900MHz dig spread spec cordless	59.99
*\$20 consumer rebate from Uniden thru 12/31/00!		
PRO-340XL	40 ch portable CB/rubber ant	D 39.99
PRO-350XL	40 ch handheld CB	D 69.99
PRO-501AXL	AM Mobile CB w/mag ant	D 34.99
PRO-501XL	AM Mobile CB	D 29.99
PC-68LTW	AM Mobile CB w/WX alert	99.99
PC-68XL	AM Mobile CB	89.99
PC-78LTW	AM Mobile CB w/WX alert	129.99
PC-78XL	AM Mobile CB	109.99
PRO-510XL	AM Mobile CB	44.99
PRO-510AXL	AM Mobile CB w/mag mt ant	49.99
PRO-520XL	AM Mobile CB	59.99
PRO-538W	AM Mobile CB w/WX	69.99
Grant-LT	SSB/AM Mobile CB	169.99
Washington	SSB/AM Base CB	229.99
ESP-26	External speaker	16.99

UNIDEN BEARCAT

BC-147XLT-1	16 ch prog scanner/instant WX	D \$ 79.99
BCT-10	Pre-prog hiway info sys scan	D 89.99
BCT-12	Pre-prog mobile warning scanner	D 159.99
BC-244CLT	30 ch scanner w/instant WX	99.99
BC-248CLT	50 ch scanner w/WX alert	109.99
BC-278CLT	100 ch scanner/SAME WX alert	189.99
BC-350A	50 ch prog/service search w/AC ps	119.99
BC-780XLT	500 ch scanner/trunk/SAME WX	369.99
BC-895XLT	300 ch prog scanner/trunking	219.99
BCT-7	Pre-prog warning scan/air/800/AC ps	179.99
BC-002	CTCSS tone board; BC-760XLT	Δ 49.99
BC-003	Switch box for BC-002	Δ 9.99
BC-004	RF preamp for BC-760XLT	Δ 24.99
BC-005	CTCSS tone board; 8500/9000XLT	Δ 37.99
BC-60XLT-1	30ch prog pocket; use AA batts	99.99
BC-80XLT	50 ch prog pocket scanner/800	149.99
UA-502	Cig power cord	11.99
AD-100	AC adapter/batt cgr; earlier scanners	16.99
AD-140	Extra charger; BC-100XLT/200XLT	13.99
BP-70	Extra battery for BC-70XLT	Δ 27.99
BP-200	Extra battery; BC-200XLT	26.99
BP-205	Extra battery; BC-100XLT	26.99
PS-001	DC power cord; original BC-60XLT	Δ 6.99
BC-120XLT	100 ch prog pocket w/aircraft	D 139.99
SC-150B	100 ch black sport pocket/800	D 159.99
SC-180B	100 ch sport pocket/800 MHz	189.99
SC-200	200 ch sport pocket/800 MHz	219.99
AD-70	Extra charger	10.99
BP-120	Extra battery	18.99
LC-120	Carrying case; BC120XLT/230XLT	19.99
LC-150B	Carrying case; SC-150B/180B	19.99
(KOS) QZ/99	Noise reduction headphones	59.99
UA-502	Cig power cord	11.99
BC-245XLT	300ch pocket/trunk/smart scan	229.99
BP-180	Extra battery	16.99
CRX-120	Desk charger; BC-245XLT	24.99
LC-120	Carrying case	19.99
UA-502	Cig power cord	11.99
BC-3000XLT	400 ch 25MHz-1.3GHz pocket	D 349.99
BP-2500	Extra batt; BC2500/3000	63.99
LC-2500	Carrying case; BC-2500/3000XLT	20.99
UA-502	Cig power cord	11.99
WX-100	SAME weather radio/hazard alert	59.99
NPD-001	National frequency book	Δ 9.99
RFD-001	IN/IL/KY/OH/MI/WI freq book	14.99
HH-940	1w submersible VHF marine hand-held	D 119.99
HH-940P	1w submersible VHF marine hand-held	149.99
HH-955	5w VHF marine hand-held	99.99
HH-980	5w 90ch dtx marine hand-held/WX alert	D 159.99
HH-985	5w 90ch marine hand-held/SAME WX alert	159.99
MC-535	25w 90 ch VHF marine Xcvr	99.99

Uniden - continued

AES Price

MC-1010	25w VHF marine Xcvr	129.99
MC-1020	25w VHF marine Xcvr	139.99
Unified Microsystems (UNM)		
XT-4	Small size CW memory keyer	\$ 69.99
KC-4	Cable set for XT-4 to transceiver	9.99
W9XT	Contest card for IBM PC & compatible	149.99
CCC-4	4pin mic contest card cable semi-kit	44.99
CCC-8	8pin mic contest card cable semi-kit	44.99

Universal Towers (UNT)

4-30	4 sq ft wind load 30' alum tower	T \$313.99
9-30	9 sq ft wind load 30' alum tower	T 422.99
12-30	12 sq ft wind load 30' alum tower	T 554.99
21-30	21 sq ft wind load 30' alum tower	T 658.99
23-30	23 sq ft wind load 30' alum tower	T 872.99
35-30	35 sq ft wind load 30' alum tower	T 982.99
4-40	4 sq ft wind load 40' alum tower	T 525.99
7-40	7 sq ft wind load 40' alum tower	T 660.99
9-40	9 sq ft wind load 40' alum tower	T 736.99
12-40	12 sq ft wind load 40' alum tower	T 872.99
15-40	15 sq ft wind load 40' alum tower	T 974.99
21-40	21 sq ft wind load 40' alum tower	T 1082.99
23-40	23 sq ft wind load 40' alum tower	T 1296.99
4-50	4 sq ft wind load 50' alum tower	T 740.99
5-50	5 sq ft wind load 50' alum tower	T 842.99
7-50	7 sq ft wind load 50' alum tower	T 947.99
9-50	9 sq ft wind load 50' alum tower	T 1053.99
15-50	15 sq ft wind load 50' alum tower	T 1399.99
16-50	16 sq ft wind load 50' alum tower	T 1510.99
4-60	4 sq ft wind load 60' alum tower	T 1054.99
6-60	6 sq ft wind load 60' alum tower	T 1293.99
7-60	7 sq ft wind load 60' alum tower	T 1376.99
9-60	9 sq ft wind load 60' alum tower	T 1476.99
3-70	3 sq ft wind load 70' alum tower	T 1374.99
4-70	4 sq ft wind load 70' alum tower	T 1689.99
6-70	6 sq ft wind load 70' alum tower	T 1719.99
7-70	7 sq ft wind load 70' alum tower	T 1796.99
3-80	3 sq ft wind load 80' alum tower	T 1853.99
4-80	4 sq ft wind load 80' alum tower	T 2145.99
2-90	2 sq ft wind load 90' alum tower	T 2223.99
B-14	Base for tower	65.99
B-18	Base for tower	65.99
B-22	Base for tower	99.99
B-26	Base for tower	127.99
Extra 14"	stubs (between base & tower)	set 12.99
Extra 18"	stubs (between base & tower)	set 24.99
Extra 22"	stubs (between base & tower)	set 40.99
Extra 26"	stubs (between base & tower)	set 40.99
Extra 30"	stubs (between base & tower)	set 60.99
RFM-11	Flat roof mt for guyed tower	44.99
RFM-14	Flat roof mt for guyed tower	44.99
RFM-18	Flat roof mt for guyed tower	69.99
RFM-22	Flat roof mt for guyed tower	93.99
RFM-26	Flat roof mt for guyed tower	124.99
R-11	Rotor mount	31.99
R-14	Rotor mount	47.99
R-18	Rotor mount	63.99
SEE LITERATURE FOR TOWER CONFIGURATIONS		
11 Top	11" top tower section	T 106.99
14 Top	14" top tower section	T 134.99
18 Top	18" top tower section	T 243.99
14 Taper	14" taper tower section	T 117.99
18 Taper	18" taper tower section	T 211.99
22 Taper	22" taper tower section	T 315.99
26 Taper	26" taper tower section	T 424.99
11 Straight	11" straight tower section	T 104.99
14 Straight	14" straight tower section	T 117.99
18 Straight	18" straight tower section	T 211.99
22 Straight	22" straight tower section	T 315.99
26 Straight	26" straight tower section	T 424.99
HD35-40	35 sq ft wind load 40' alum tower	T 1512.99



Universal - continued AES Price

HD21-50	21 sq ft wind load 50' alum tower T	1613.99
HD9-60	9 sq ft wind load 60' alum tower ...T	1692.99
HD16-60	16 sq ft wind load 60' alum tower T	2038.99
HD21-60	21 sq ft wind load 60' alum tower T	2147.99
HD8-70	8 sq ft wind load 70' alum tower ...T	1903.99
HD12-70	12 sq ft wind load 70' alum tower T	2358.99
HD17-70	17 sq ft wind load 70' alum tower T	2572.99
HD21-70	21 sq ft wind load 70' alum tower T	2680.99
HD8-80	8 sq ft wind load 80' alum tower ...T	2436.99
HD9-80	9 sq ft wind load 80' alum tower ...T	2541.99
HD11-80	11 sq ft wind load 80' alum tower T	2887.99
HD12-80	12 sq ft wind load 80' alum tower T	2891.99
HD16-80	16 sq ft wind load 80' alum tower T	3104.99
HD4-90	4 sq ft wind load 90' alum tower ...T	2536.99
HD8-90	8 sq ft wind load 90' alum tower ...T	2992.99
HD11-90	11 sq ft wind load 90' alum tower T	3421.99
HD4-100	4 sq ft wind load 100' alum tower T	3397.99
HD8-100	8 sq ft wind load 100' alum tower T	3635.99
B-30	Base for HD tower	199.99
RFM-30	Flat roof mt for guyed tower	174.99
1-5/8SC	Flange bearing	94.99
2-3/16SC	Flange bearing	108.99
Top Plate	Flange plate welded to top section	22.99

SEE LITERATURE FOR TOWER CONFIGURATIONS

30 Taper 30" taper tower section T 533.99

30 Straight 30" straight tower section T 533.99

1-1/4" OD x 5 ft aluminum mast T 22.99

1-1/4" OD x 10 ft aluminum mast T 31.99

1-1/2" OD x 10 ft aluminum mast T 39.99

2" OD x 8 ft aluminum mast T 47.99

2" OD x 16 ft aluminum mast T 94.99

ALL UNIVERSAL TOWERS products are drop-shipped (shipped direct to you from the UNIVERSAL TOWERS factory). On these factory drop-shipments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Mt. Clemens, Michigan via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order products. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

VALOR (See PRO AM)
VANCO (VCO)

370052	3½ digit multimeter	\$ 19.99
SWR-1	SWR/field strength meter	19.99
SWR-3	Mini SWR meter	14.99

VAN GORDEN (VAN)

Hi-Q 1:1 balun	\$ 14.99
Hi-Q 4:1 balun	14.99
Antenna center insulator	6.99
Antenna end insulator	pair 4.99
Dog bone type antenna insulator	each .99
NR-100	Nylon antenna guy rope 100 ft. 4.99
NR-1,000	Nylon ant guy rope 1,000 ft. 44.99
D-80	80m 130' wire dipole antenna 32.99
SD-80	Short 90' 80m dipole 36.99
D-40	40m 66' wire dipole antenna 29.99
SD-40	Short 45' 40m dipole 34.99
D-20	20m 33' wire dipole antenna 28.99
D-15	15m 22' wire dipole antenna 27.99
D-10	10m 16' wire dipole antenna 26.99
All Bander	Dipole 160-10m (use tuner) 135' ant 29.99
Shorty All Bander	160-10m (use tuner) 70' ant 44.99
G5RV	Flat-top 5-band 102' ant/xmfr/100' cable 50.99
G5RV-E	Flat-top 5-band 102' ant/31' twinlead 28.99
G5RV-JR	Flat-top 4-band 52' ant/17' twinlead 24.99
G5RV-M	Flat-top 5-band 204' ant/65' twinlead 50.99

Van Gordon- continued AES Price

N connector	Type N connector for 9913	4.99
#14	Stranded hard drawn ant wire 100 ft.	11.99
#14	Stranded hard drawn ant wire 150 ft.	16.99
300 ohm	1kw transmitting twinlead 100 ft.	19.99
450 ohm	18ga solid ladderline 100 ft.	14.99
450 ohm	18ga solid ladderline 1,000 ft.	109.99
450 ohm	14ga stranded ladderline 100 ft.	29.99
450 ohm	14ga stranded ladderline 1,000 ft.	229.99
(WA1)	WA1FFL Ladder-Loc 450 ohm ctr ins	12.99
RG-213	Non-contaminating per ft.	.49
RG-213/500	Non-contaminating .500 ft. Roll	179.99
8X-1.5ST	1.5' RG-8X coax/silver teflon PL259s	7.99
8X-3ST	3' RG-8X coax/silver teflon PL259s ...	8.99
8X-6ST	6' RG-8X coax/silver teflon PL259s ...	10.99
8X-12ST	12' RG-8X coax/silver teflon PL259s	11.99
8X-25ST	25' RG-8X coax/silver teflon PL259s	15.99
8X-50ST	50' RG-8X coax/silver teflon PL259s	24.99
8X-75ST	75' RG-8X coax/silver teflon PL259s	31.99
8X-100ST	100' RG-8X coax/silver teflon PL259s	37.99
213-25ST	25' RG-213 coax/silver teflon PL259s	25.99
213-50ST	50' RG-213 coax/silver teflon PL259s	38.99
213-75ST	75' RG-213 coax/silver teflon PL259s	54.99
213-100ST	100' RG-213 coax/silver teflon PL259s	72.99

VECTRONICS (VEC)

VC-300M	300w mobile antenna tuner	\$ 99.99
VC-300DLP	300w antenna tuner	149.99
VC-300D	300w digital antenna tuner	179.99
HFT-1500	1.5kw antenna tuner	399.99
AT-100	.3-30 MHz active antenna/tuner	79.99
HPF-1	High pass filter, 75 or 300 ohms	24.99
HPF-2	Deluxe high pass filter, 75 or 300 ohms	29.99
LP-30	1.5kw low pass filter	69.99
LP-2500	2.5kw low pass filter	129.99
CK-200	Deluxe keyer	79.99
DL-300M	300w dummy load	44.99
DL-650M	1.5kw dummy load	74.99
DL-2500	2.5kw dummy load	179.99
PM-30HF	300/3kw HF wattmeter	79.99
PM-30UV	30/300w VHF/UHF wattmeter	89.99
AC-12	12vdc 300ma adapter	14.99
PS-30F	25A power supply, 30A surge	109.99
PS-50F	35A power supply, 50A surge	169.99
121K	Crystal radio set kit	19.99
131K	Aircraft receiver kit	29.99
201K	CW keyer kit	24.99
412K	Nicad/NiMH battery conditioner kit	49.99
422K	FM broadcast SCA decoder kit	27.99
820K	Super CW audio filt kit, 750Hz center	12.99
821K	Super CW audio filter w/1w amp kit	19.99
830K	Super SSB audio filter kit	19.99
841K	Tunable SSB/CW audio filter kit	34.99
1140K	40m receiver kit	29.99
1240K	40m QRP CW transmitter kit	29.99
1290K	AM radio transmitter kit	29.99
1294K	TV transmitter kit	27.99
1402K	2m preamp kit	17.99
1422K	220MHz preamp kit	12.99

VENTENNA (FOR)

VT-14	2m Ventenna 3' 2.6 db base ant	\$ 39.99
VT-15S	Scanner Ventenna 3' 2.6 db base ant	39.99
VT-22	220 Ventenna 25" 2.6 db base ant	39.99
VT-44	440 Ventenna 14" 2.6 db base ant	39.99

VIBROPLEX (VIB)

090	Original Gold Bug	\$299.99
100	Original Presentation Super deluxe bug	269.99
105	Original Deluxe Bug	199.99
110	Original Standard Bug	159.99
113	VibroKeyer Gold Paddle	269.99
115	VibroKeyer Deluxe Paddle	179.99
120	VibroKeyer Standard Paddle	139.99

Vibroplex- continued AES Price

123	Iambic Gold Paddle	269.99
125	Iambic Presentation Paddle	239.99
130	Iambic Deluxe Paddle	179.99
135	Iambic Standard Paddle	139.99
145	Triangular Brass Racer Iambic paddle	99.99
150	Square Brass Racer Iambic paddle	139.99
153	Gold straight key	269.99
155	Standard straight key	139.99
160	Deluxe straight key	179.99
162	Gold Hand key/Iambic Paddle double	359.99
163	Gold Hand key/VibroKeyer Paddle double	359.99
165	Deluxe Hand key/Iambic Paddle double	319.99
170	Dlx Hand key/VibroKeyer Paddle double	319.99
175	Standard Hand key/Iambic Paddle double	269.99
180	Std Hand key/VibroKeyer Paddle double	269.99
185	Square Racer Deluxe Iambic paddle	134.99
190	Square Racer Standard Iambic paddle	109.99
195	Blue Racer 2000 Millennium Bug	179.99
200	Code Warrior Junior Paddle	99.99

WA1FFL (WA1)

Ladder-Loc	450 ohm ladderline center attach	\$ 12.99
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W2AU (Unadilla) (W2A)

W2AU 1:1	160-10m balun, lightning arrester	\$ 24.99
W2AU 4:1	160-10m balun, lightning arrester	24.99
W2AU Beam	Balun, 1:1	24.99
W2DU-HF	1:1 1.8-30 MHz choke balun	26.99
W2DU-VHF	1:1 30-250 MHz choke balun	26.99
W2DU Beam	Balun 40-10m 1:1 choke balun	26.99
HA	AN-sulator center insulator	9.99
HE	END-sulator end insulators	pair 4.99
KW-80CW	Reyco 80m CW ant traps	pair 48.99
KW-80F	Reyco 75m phone ant traps	pair 48.99
KW-40	Reyco 40m antenna traps	pair 42.99
KW-30	Reyco 30m antenna traps	pair 42.99
KW-20	Reyco 20m antenna traps	pair 41.99
KW-17	Reyco 17m antenna traps	pair 41.99
KW-15	Reyco 15m antenna traps	pair 41.99
KW-12	Reyco 12m antenna traps	pair 41.99
KW-10	Reyco 10m antenna traps	pair 41.99
W2AU/W2VS	5-band ant kit (use tuner)	85.99

W5YI (W5Y)

EUS	Extra Upgrade Software	\$ 34.99
GUS	General Upgrade Software	34.99
GW05	Gordon West 6 ea 0-7 wpm code tapes	29.99
GW04	Gordon West Extra 4 ea theory tapes	19.99
GWEM	Gordon West Extra study manual	14.99
GW64	Gordon West General 4 ea theory tapes	19.99
GW6M	Gordon West General study manual	12.99
GWT4	Gordon West Tech 4 ea theory tapes	19.99
GWTM	Gordon West Technician study manual	11.99
HOS	Ham operator soft package (all classes)	39.99
NCSW	No-code ham radio WIN soft package	34.99
NCVP	Ham No-Code video seminar/manual	29.99
QP3/TNP	Elements 2/3/4 New Question Pools	9.99
TPG	Tech/General manuals/soft/code	49.99

WAHL (WAH)

7740	Quick charge cordless soldering iron kit	\$ 47.99
7971	30 minute butane soldering iron	19.99
7974	120 minute butane soldering iron	27.99

WALNUT CREEK (WAL)

Ham QRZ	US & international calls plus programs	\$ 29.99
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WELLER (WEL)

7200PK	75w soldering gun kit	\$ 27.99
EC-1002-1	40w temp controlled solder stn	199.99
WP-25	25w professional soldering iron	32.99
W-60P	60w temp controlled soldering iron	62.99
WSTA3	Pyrophen portable LP soldering iron	99.99
WST2	Pyrophen Jr. portable butane iron	87.99
WTCPT	60w temp controlled soldering stn	119.99



AES Price

WILSON (WIL)

Little Wil Magnetic mt CB antenna	\$ 29.99
Trucker 2000 Black mobile 1/4-24 CB whip ...	54.99
W-1000 Magnetic Black mobile CB antenna	72.99
W-1000 Roof Top Black mobile CB antenna	54.99
W-1000 Trunk Lip Black mobile CB antenna	62.99

WINEGARD (WIN)

CX-0625 25' RG-6 TV coax w/F connectors ...	\$ 10.99
CX-0650 50' RG-6 TV coax w/F connectors ...	15.99
CX-0675 75' RG-6 TV coax w/F connectors ...	19.99
CX-6100 100' RG-6 TV coax w/F connectors ..	24.99
DS-2000 Universal pipe/tower mt; TV ant	16.99
GS-2000 Amplified Sensor II TV antenna	79.99
LB-2000 Dual output digital LNB	75.99
PR-7010 22 el 66.5" boom Prostar TV ant	39.99
PR-7032 33 el 103.25" boom Prostar TV ant ..	64.99
PR-7042 43 el 149.75" boom Prostar TV ant ..	99.99
TV-2900 Outdoor TV matching transformer ..	2.99
SM-2200 Base scanner ant/50' cbl/F connectors	45.99

X-10 (X10)

HOME AUTOMATION/SECURITY

AM-466 3-pin grounded appliance module Δ	\$ 9.99
AM-486 2-pin polarized appliance module Δ	9.99
CK-11A X-10 ActiveHome automation/win soft Δ	49.99
DS-10A Long range door/window sensor	9.99
KF-574 Key fob security remote control	9.99
MC-460 6 function 8 unit mini controller	4.99
PH-508 Remote 110 db siren	19.99
PK-9 REX-10 barking dog alarm	39.99
PR-511 2 floodlite motion detect/rem light Δ	19.99
RW-694 4 unit wireless wall switch	2.99
RW-724 3 unit+dimmer wireless wall sw	3.99
RW-6900 Wireless wall switch set	6.99
SC-503 6 function 16 unit maxi controller Δ	9.99
SH-10A Indoor 90 db remote alarm siren	8.99
SP-554A Wireless motion detector	29.99
SR-227 Wall receptacle mod/custom plate Δ	8.99
TH-2807 Thermostat set-back controller	7.99
WS-467 Wall switch module	9.99

YAESU (YAE)

FT-1000MP 9-band Xcvr/EDSP/tuner/ps ...D	2399.99
FT-1000MP MK V HF Xcvr/EDSP/tuner/ps ...	3399.99
DVS-2 Digital voice recording module	219.99
FH-1 Remote control keypad	88.99
MD-100A8X Desk mic w/tone control	129.99
MH-31B8 Extra hand microphone	39.99
SP-8 External speaker w/filters	159.99
LL-7 Phone patch unit for SP-8	139.99
TCXO-4 TCXO unit; FT-1000MP only	99.99
TCXO-6 Deluxe TCXO unit, 0.5 ppm	174.99
YF-110CN 250 Hz 3rd IF main Rcvr CW filt ..	144.99
YF-110SN 2 KHz 3rd IF main Rcvr SSB filt ..	144.99
YF-114CN 250 Hz 2nd IF main Rcvr CW filt ..	144.99
YF-114SN 2 KHz 2nd IF main Rcvr SSB filt ..	144.99
YF-115C 500 Hz CW Collins mech filter	159.99
YH-77ST Open-air type stereo headphones ..	51.99
TCXO-1 Temp compensated xtal osc; FT-1000 Δ	179.99
FT-1000D Dlx Xcvr w/BPF/TCXO/XF-ABCD +	3799.99
DVS-2 Digital voice recording module	219.99
FIF-232C Interface for RS-232	95.99
MD-100A8X* Desk mic w/tone control	129.99
*Cable needed for FT-1000D; contact service for info	
SP-5 External spkr w/audio filter	144.99
LL-5 Phone patch unit for SP-5	129.99
XF-455MC 600Hz CW filter (455KHz); subrcvr	144.99
YF-110CN/XF-F 250 Hz CW xtal filter (455 KHz)	144.99
YH-77ST Open-air type stereo headphones ..	51.99
FT-920 9-band Xcvr/AF-DSP/tuner/6m/kyr +	1339.99
FM-1 FM unit FREE with FT-920! Limited Time!	
TCXO-7 TCXO unit FREE with FT-920! Limited Time!	
FP-1023 23A switching ps w/fan, 25A surge ...	159.99

Yaesu - continued

FP-1030A 25A ps, 30A surge w/meters	249.99
FM-1 FM unit	62.99
MD-100A8X Desk mic w/tone control	129.99
SP-8 External speaker w/filters	159.99
LL-7 Phone patch unit for SP-8	139.99
TCXO-7 TCXO unit	99.99
YF-116A 6 KHz AM filter	119.99
YF-116C 500 Hz CW filter	119.99
YH-77ST Open-air type stereo headphones ..	51.99
FT-847 HF/6m/2m/430 Earth Station Xcvr/mic +	*1499.99
*Price w/instant coupon; coupon expires 10/31/00	
FP-1023 23A switching ps w/fan, 25A surge ...	159.99
FP-1030A 25A ps, 30A surge w/meters	249.99
ATAS-100 HF/6/2/430 motorized mob ant ..	319.99
ATBK-100 Antenna base kit; use w/base mt ..	89.99
CT-61 Interface cable; FT-847 to amp	15.99
FC-20 Automatic antenna tuner	269.99
FVS-1A Voice synthesizer	43.99
MD-100A8X Desk mic w/tone control	129.99
MH-36DB DTMF mobile microphone	60.99
MMB-66 Mobile mounting bracket	39.99
SP-8 External speaker w/filters	159.99
LL-7 Phone patch unit for SP-8	139.99
YF-115C 500 Hz CW Collins mech filter	159.99
YF-115S-02 2.5 KHz SSB Collins mech filt ..	159.99
YH-77ST Open-air type stereo headphones ..	51.99
FT-840 HF Xcvr/SW Rcvr/mic	*649.99
*Price w/instant coupon; coupon expires 10/31/00	
FP-1023 23A switching ps w/fan, 25A surge ...	159.99
FP-1030A 25A ps, 30A surge w/meters	249.99
FC-10 External coax fed auto tuner	379.99
FC-800 External long wire auto tuner	439.99
FIF-232C Interface for RS-232	95.99
FM-747 FM unit	62.99
MD-100A8X* Desk mic w/tone control	129.99
*Cable needed for FT-840; contact service for info	
MLS-100 Mobile speaker	45.99
MMB-20 Mobile mount	34.99
SP-6 External speaker w/filter	144.99
SP-7 Mobile speaker	40.99
TCXO-4 TCXO unit	99.99
YF-112A 6 KHz AM filter	119.99
YF-112C 500 Hz CW filter	119.99
YH-77ST Open-air type stereo headphones ..	51.99
FT-100 Mini HF Xcvr/6m/2m/440/DSP/TTP ...D	*899.99
*Price w/instant coupon; coupon until gone!	
FT-100D MiniHF/6/2/440/DSP/TTCWfilt/TCXO/dec +	1199.99
FP-1023 23A switching ps w/fan, 25A surge ...	159.99
FP-1030A 25A ps, 30A surge w/meters	249.99
ATAS-100 HF/6/2/430 motorized mob ant ..	319.99
ATBK-100 Ant base kit; use w/base mt ..	89.99
CT-39 Packet cable	9.99
CT-58 Band data cable; Yaesu amplifier ...	29.99
CT-62 CAT interface cable	29.99
FC-20 Automatic antenna tuner	269.99
FTS-27 CTCSS decoder unit; FT-100	47.99
MLS-100 Mobile speaker	45.99
MMB-62 Remote front panel mounting bkt	39.99
MMB-67 Quick release bracket	29.99
SP-6 External speaker w/filter	144.99
LL-5 Phone patch unit for SP-6	129.99
SP-7 Mobile speaker	40.99
T-9021925 Extra DC cord	42.99
TCXO-8 TCXO unit; FT-100	99.99
XF-117A 6 KHz AM filter	89.99
XF-117C 500 Hz CW filter; FT-100	99.99
XF-117CN 300 Hz CW filter	99.99
Suggest dealer installation of filters in FT-100; only 2 sockets; use XF-117C & XF-117A or XF-117CN	
YH-77ST Open-air type stereo headphones ..	51.99
YSK-100 Separation kit	79.99
CT-11 Cable - FL-7000 to FT-890/900	19.99
CT-20 Mic cable for use with MD-1C8	4.99
CT-26 Mic adapter cable; modular to 8-pin Δ	22.99

AES Price

Yaesu - continued

E-767 Cable - FL-7000/767/990/1000/MP	16.99
FAS-1-4R Remote antenna selector	129.99
FRB-757 External relay box	31.99
FX-1 Transceiver-FAX interface/controller ...D	4.99
MH-31A8J Extra hand mic; FT-900	39.99
XF-110CN 455KHz 250Hz CW filter; FT-900 D	129.99
YA-30 1.8-30 MHz broadband dipole ant	239.99
YH-77ST Open-air type stereo headphones ...	51.99
YS-60 1.8-60 MHz 2kw PEP wattmeter	129.99
YS-500 140-520 MHz 200w PEP wattmeter ..	109.99
YSK-900 20' rem mtg kit/tnk mtg bkt; FT-900 Δ	68.99
Quadra System VLP/1000 160-6 amp/ps/tuner	
MR-1000 Quadra system mounting rack	299.99
FRG-100B 1.3-30 MHz shortwave receiver ..†	569.99
FM Unit-100 FM unit	47.99
TCXO-4 TCXO unit	99.99
YF-110CN/XF-F 250 Hz CW xtal filter	144.99
YF-115C 500 Hz CW Collins mech filter	159.99
VR-500 1M-1.3G AM/FM/SSB hand/cell blkd +	249.99
51R Clone/CT-35 Clone cable; VR-500	9.99
ADMS-3 Windows programming software ..	39.99
CSC-72 Soft case for VR-500	19.99
EDC-5B DC adapter w/noise filter	26.99
EDC-6 DC adapter; plug & wire only	7.99
FNB-59 Nicad battery for VR-500	29.99
NC-60B Wall charger	14.99
E-736 DC cable for FT-736R	16.99
FEX-736-50 6m module for FT-736R	279.99
FEX-736-220 220 MHz module; FT-736R ...Δ	309.99
FEX-736-1.2 1.2 GHz module for FT-736R Δ	539.99
FTS-8 Encoder/decoder for FT-736R	62.99
Keyer-B Electronic keyer unit; FT-736R	26.99
AD-3 100w 2m/440 duplexer	52.99
CSC-19 Soft case; FT-290/690/790R	16.99
FBA-8 Holder for 9 C nicads; 290/690/790 Δ	39.99
NC-26B Wall cgr for FBA-8; 290/690/790 Δ	9.99
FRC-4 DTMF pager unit; FT-5200/6200 ...D	2.99
FTS-7A Encoder/decoder; newer 290/690/790 Δ	44.99
MH-27B8 8-pin TTP mic; FT-5200/6200	65.99
MW-2* Wireless rem cont mic; 5200/6200 .D	29.99
* Requires jumper modification	
MMB-53 Mobile mtg bkt for MW-2	4.99
FT-8100R 50/35w 2m/440 FM Xcvr/TTP ...†	419.99
ADMS-2D Windows programming software ..	39.99
CT-39 Packet cable	9.99
FTS-22 CTCSS decode unit	68.99
MLS-100 Mobile speaker	45.99
MEK-2 Mic extension kit	42.99
MMB-60 Quick release mobile bracket	31.99
YSK-8100 Remote separation kit	69.99
FT-90R 50/35w 2m/440 micro FM Xcvr ...†	*359.99
*Price w/instant coupon; coupon expires 10/31/00	
ADMS-2E Windows programming software ..	39.99
MEK-2 Mic extension kit	42.99
MLS-100 Mobile speaker	45.99
SP-7 External speaker	40.99
YSK-90 Remote separation kit	64.99
MH-39A6J Extra regular mic; FT-8500	89.99
YSK-8500 Remote separation kit; FT-8500 Δ	69.99
FT-3000M 70w 2m FM Xcvr/TTP/ext rcv ...†	389.99
ADMS-2D Windows programming software ..	39.99
CT-39 Packet cable	9.99
DVS-4 Digital voice recording module	47.99
FTS-17A CTCSS decode unit	47.99
MLS-100 Mobile speaker	45.99
2400 Mic Cable 2' packet cable; 2400H/2500M Δ	9.99
FRC-6 DTMF pager unit; FT-2500M/7400H D	4.99
MH-27A8J TTP mic/modular plug; early 2500M Δ	60.99
MH-36C8J Extra TTP mic; late FT-2500M	60.99
FT-2600M 60w compact 2m FM Xcvr/TTP mic +	199.99
ADMS-2E Windows programming software ..	39.99
MLS-100 Mobile speaker	45.99
SP-7 External speaker	40.99



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FT-1500M 50w 2m FM Xcvt/TTP mic	159.99
*Price w/instant coupon; coupon expires 10/31/00	
ADMS-2F Windows programming software	39.99
MH-36C8J Extra TTP microphone	60.99
MLS-100 Mobile speaker	45.99
SP-7 External speaker	40.99
FP-712/Vertex 10A switching ps, 12A surge D	79.99
FP-1023 23A switching ps w/fan, 25A surge	159.99
FP-1030A 25A ps, 30A surge w/meters	249.99
LF-1 Mobile 13A DC noise filter	26.99
MLS-100 Mobile speaker	45.99
SP-3 Small mobile speaker	23.99
SP-4 Mobile speaker	31.99
SP-7 External speaker	40.99
VXR-5000VADC/Vertex 25w 2m FM rpttr	1199.99
VXR-5000V/TA/Vertex 25w 2m FM rpttr/ps ..	1399.99
VXR-5000UCDC/Vertex 25w 440 FM rpttr	1199.99
VXR-5000U/TC/Vertex 25w 440 FM rpttr/ps ..	1399.99
Repeaters require service dept. set-up; \$72 minimum	
(COM) ID-8 Auto morse code ID'er	69.99
MR-KIT1 19" rack mtg kit; VXR repeater ...	199.99
VXD-40UB/Vertex 440 duplexer (untuned) .	199.99
Tuning charge; duplexer (specify freqs) ...	50.99
VX VPL-1D/Vertex PC prog cable & software ..	95.99

Accessories for 09-series

FNB-4A 500ma 12v battery; 09-series	\$ 62.99
FTS-6 Encoder/decoder; 09-series	4.99

Accessories for FT-26/415/416/530

CA-8 2 chg sleeves; NC-50/FT-416/530	\$ 1.99
CLIP-3 Belt clip	4.99
CSC-50 Vinyl case; 415/416/FNB25	1.99
FBA-12 AA cell holder	19.99
FT-23 Mk II/12 5w 2m FM HT/FNB-12S/cgr ..	149.99
FT-33R 5w 220 FM HT/batt/cgr	249.99
FT-411 Mk II/12 5w 2m HT/FNB-12S/cgr/TTP ..	159.99

Accs for FT-23/33/73/411/811/470/911

CA-7 2 charging sleeves; NC-50/411E/470....	\$ 27.99
CLIP-1 Belt clip	7.99
CSC-24S Soft case; FT-23/33/73 w/FNB-12S ..	.99
CSC-28 Soft case; FT-23/33/73 w/FNB-12S ..	16.99
CSC-35 Soft case; FT-411/811/911/FNB-17 ..	.99
CSC-36 Soft case; FT-411/FNB-10/FBA-10 ..	4.99
CSC-37 Soft case; FT-411 w/FNB-12S/14	16.99
FBA-17 AA battery holder	19.99
FNB-12S 600ma 12v (5w) battery	55.99
FNB-14 1000ma 7.2v battery	55.99
FNB-17 600ma 7.2v battery	34.99
FTS-12 Encoder/decoder for FT-23/33/73	60.99
FTS-17A Encoder/decoder; FT-411	47.99
FTT-4 DTMF (TTP) unit for FT-23/33/73	4.99
MH-30C2B Speaker/microphone	45.99
MH-34C2B Compact lapel speaker/mic	30.99
MH-35A2B Spkr mic/clip/earphone jack	24.99
MMB-46 Mobile hanger for FT-470	4.99
NC-28B Extra wall charger for FNB-17	14.99
NC-34B Wall charger for FNB-14	14.99
NC-65B/NC-18B Wall charger for FNB-12S ...	14.99
PA-6 Mobile DC adapter/cgr; FNB-14/17	31.99
YH-2 Lightweight VOX headset w/mic	30.99

FT-50RD/41B 5w 2m/440 HT/FNB41/FTT-12 ..	249.99
ADMS-1E Windows programming software ..	39.99
CA-15 Charging stand; FT-10/40/50	27.99
NC-60B Wall charger; FNB-40/41/CA-15	14.99
CLIP-10 Spring loaded belt clip	7.99
CN-2 BNC to SMA adapter: FT-10/40	8.99
CN-3 BNC to SMA adapter: FT-50R	8.99
CSC-68 Soft case; FNB-41/FBA-15	16.99
CSC-69 Soft case; FNB-40	16.99
CSC-V10 Cordura soft case; FT-10/40/50 ..	27.99
CT-27A Cloning cable	10.99
CT-30 Microphone Y adapter	10.99
EDC-5B DC adapter w/noise filter	26.99
EDC-6 DC adapter; plug & wire only	7.99

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FBA-15 4-AA battery holder	19.99
FBA-21 6-AA battery holder	38.99
FEP-10 Earphone	9.99
FNB-40 650ma 6v battery	29.99
FNB-41 600ma 9.6v (5w) battery	58.99
FNB-42 1100ma 9.6v (5w) battery	62.99
FNB-V47 1100ma 7.2v battery w/belt clip ..	55.99
PA-17 Battery cable extender	57.99
FNB-49 600ma 6v battery	9.99
FTT-12 16-key keypad/dec/DVRS; FT-50R ...	19.99
LCC-10C Leather case/belt clip; 50/FNB41/V47	31.99
LCC-10S Leather case/swivel; 50/FNB41/V47	31.99
LCC-11S Leather case/swivel; 50/FNB40 ..	14.99
MH-30C2B Speaker/mic; use CT-30 also ...	45.99
MH-34B4B Speaker/mic	30.99
MH-37A4B Earpiece/microphone	30.99
NC-50 1-hour dual slot charger	92.99
CA-14 2 charging sleeves; NC-50	26.99
RH-1 Black rubber case protector	7.99
RH-1R Orange rubber case protector	7.99
VC-25 VOX headset	62.99
YHA-54 Replacement 2m/440 BNC duck ...	16.99
MH-29A2B LCD disp spkr/mic; FT-530/51R ..	49.99

Accessories for FT-11R/41R/51R

CA-10 2 charge sleeves; NC-50/11/41/51 ..	\$ 14.99
CSC-61 Case; 11R/41R/FNB33/38/FBA14 ..	16.99
CSC-62 Soft case; FT-11R/41R/FNB-31	4.99
CSC-66 Soft case; FT-51R/FNB33/38/FBA14 ..	16.99
CSC-67 Soft case for FT-51R/FNB-31	14.99
EDC-12 DC adapter; FT-11R/41R/51R	38.99
FBA-14 AA battery holder	19.99
FNB-31 600ma 4.8v battery	47.99
FNB-33 1200ma 4.8v battery	62.99
FNB-38 600ma 9.6v battery	75.99
FTS-26 CTCSS decoder	47.99
MH-32A2B Compact lapel speaker/mic	24.99
MH-35A2B Spkr mic/clip/earphone jack	24.99
MH-37B2B Earpiece/microphone	24.99
NC-55B Wall charger for FNB-31	14.99
VC-22 Headset w/VOX	62.99
VX-1R 500mw 2m/440 submini HT/lith ion ..	149.99
ADMS-1E Windows programming software ..	39.99
CN-3 BNC to SMA adapter	8.99
CSC-71 Soft case for VX-1R	16.99
CT-44 2-pin spkr/mic adapter	12.99
EDC-15 DC adapter	19.99
FBA-20 Battery holder	19.99
FEP-10 Earphone	9.99
FNB-52LI Extra 700ma 3.6v lith ion batt ..	36.99
MH-34B4B Speaker/mic	30.99
MH-37A4B Earpiece/microphone	30.99
NC-66B Extra 2 hour wall charger	18.99
VC-25 VOX headset	62.99
VX-5R 5w 6m/2m/440 FM HT/lith ion batt ..	*299.99

*Price w/instant coupon; coupon expires 10/31/00

ADMS-1E Windows programming software ..	39.99
CD-15 Charger stand (use with NC-72B) ..	29.99
CN-3 BNC to SMA adapter	8.99
CSC-73 Soft case for VX-5R	19.99
CT-27A Cloning cable	10.99
CT-44 2-pin spkr/mic adapter	12.99
EDC-5B DC adapter w/noise filter	26.99
EDC-6 DC adapter; plug & wire only	7.99
FBA-23 2 AA cell battery case	25.99
FNB-58LI Extra 1100ma 7.2v lith ion batt ..	69.99
MH-34B4B Speaker/mic	30.99
MH-37A4B Earpiece/microphone	30.99
NC-72B Extra wall charger	18.99
SU-1 Altitude/barometric pressure sensor ...	35.99
VC-25 VOX headset	62.99
VX-150/Vertex 5w 2m HT/batt/cgr/16key TTP ..	*129.99
*Price w/instant coupon; coupon expires 10/31/00	
ADMS-1F Windows programming software ..	39.99

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CN-3 BNC to SMA adapter	8.99
CT-27A Cloning cable	10.99
CT-44 2-pin spkr/mic adapter	12.99
EDC-5B DC adapter w/noise filter	26.99
EDC-6 DC adapter; plug & wire only	7.99
FBA-25 6 AA cell battery case	48.99
FNB-V57 1100ma 7.2v battery	70.99
FNB-64 Extra 700ma 7.2v battery	43.99
LCC-150/TT Leather case	23.99
LCC-150S/TT Leather case w/swivel	31.99
MH-34B4B Speaker/mic	30.99
MH-37A4B Earpiece/microphone	30.99
NC-72B Extra wall charger	18.99
VC-400B 1-hour desk top rapid charger ..	56.99
VC-25 VOX headset	62.99

ANTENNA ROTORS

G-450A 10 sq ft antenna rotor/6-wire	\$259.99
G-550 12 sq ft elevation rotor/6-wire	249.99
G-800SA Med/hvy duty 450 degree 17sq ft/5-wire	339.99
G-800DXA Med/hvy duty 17sq ft/presets/5-wire	429.99
G-1000DXA HD 450 degree 23sq ft/presets/5-wire	519.99
G-2800DXA HD 450 degree 34sq ft/presets/6-wire	1139.99
G-2800SDX HD 450 degree 34sq ft/pre/6-wire ...	1139.99
G-5500 11 sq ft azimuth/elevation rotor/2x6-wire	629.99
GA-2500 Tower absorber joint; G-450/800 ...	79.99
GA-3000 Tower absorber joint; G-1000/2800 ..	119.99
GC-038 Mast clamp; G-450/800/1000/5500 ..	31.99
GC-048 Mast clamp; G-2800	47.99
GL-33 Mast adjustment plate	14.99
GS-050 50mm thrust bearing; mast 1 1/4-2" ...	31.99
GS-065 65mm thrust bearing; mast 1 1/4-2 1/4"	47.99
GS-232A Computer interface; DXA rotors	539.99
C-1000 Interface cable; GS-232A - SDX/G5500	29.99
GS-680U Universal self-adjusting mast bearing	99.99
Sep Kit Separation kit for G5500	23.99

See BELDEN for rotor cable

CONSUMER ELECTRONICS

VXA-120 Aviator Pro II 4w air HT	\$299.99
VXA-100-16/41B Aviator Pilot 5w air HT/VOR ...	499.99
VXF-10/Vertex FRS handheld w/WX	79.99
EDC-15 DC adapter	19.99
FEP-10 Earphone	9.99
FNB-53 Nicad battery pack	19.99
MH-34B4B Speaker/mic	30.99
MH-37A4B Earpiece/mic	30.99
NC-66B Wall charger for FNB-53	18.99

ZEISS (ZEI)

52 20 10 Mini Quick 5x10 monocular	\$ 89.99
52 20 28 10x25 pocket binoculars	379.99
52 20 47 10x25 black binoculars	459.99
52 30 09 8x30 black binoculars	399.99
52 40 06 7x42 rubber armored binoculars ...	949.99
52 40 07 7x45 black forest binoculars	1199.99
52 40 13 10x40 rubber armored binoculars ..	969.99
52 56 59 8x56 black forest binoculars	1399.99

CLOSE-OUTS

AEA WeFax-256 WX FAX Win prog; 1232/2232	\$ 79.99
ALI EDC-52 Quick charger; DJ-GIT	49.99
ALP DX-SD 80/20m 38' short dipole	59.99
AMI 1.5:1-HB75 W2FMI 1.5:1 dipole balun ...	49.99
AMI 1.78:1-HMMU50 W2FMI multimatch unun	49.99
AMI 4:1-HB/U200 W2FMI 4:1 off center fed balun	49.99
AMI 12:1-HB600 W2FMI 12:1 rhombic/V-beam balun	139.99
AOR AR-16B .5-1300 hand scan/cell bkld ...	199.99
AOR AR-8200B .5-2040 hand/SSB/cell bkld	499.99
ASP MONR31 L/H/U gain gnd plane monitor ant	49.99
B&K 541 Component comparator	199.99
B&K 830 Autoranging capacitance meter	169.99
B&K 1646 0-16V, 0-10A power supply	249.99
B&K 2831A Digital bench multimeter	169.99
BAY FPR-1B AM/FM/SW 30min Freeplay radio	49.99



Closeouts - continued AES Price

BAY FPR-2	AM/FM 60 minute Freeplay radio	49.99
BAY FPR-2SM	AM/FM/solar gray case Freeplay	49.99
BAY FP-SL-C-BL	Trans blue self powered lantern	39.99
BEN XW-1	Low voltage DC fuse panel	59.99
BIR 25-T-MN	25w dummy load w/type N male	89.99
BIR 43P	Peak reading directional mtr, S0239s	369.99
BIR 50-T-MN	50w dummy load w/type N male	119.99
BIR 4273	1.5-35 MHz variable RF sig sampler*	139.99
*2 QC connectors required - not included		
BIR 4273-100	HF sampler; for Bird equip install	129.99
BIR 4304A	25-1000 MHz 500w wattmeter	449.99
BIR 4431	Wattmeter, variable RF tap, S0-239s	429.99
BUT HF-5B	2el 20/17/15/12/10m butterfly beam	399.99
BUT P-5	1:1 balun	39.99
CES 4700VP	Telephone interconnect	149.99
CHR AH-50	5w 6m FM HT w/nicad battery	99.99
CHR NP-126	12v nicad battery	59.99
CMT CA-Super22	220 6.6db 5' 11" base ant	119.99
CMT CF-413A	440/1.2 500/200w N w/leads	39.99
CMT CF-4130A	440/1.2 500/200w N, no leads	39.99
CMT CFX-431B	2m/440/900-12 N/UHF/UHF/N leads	49.99
CMT CFX-4310B	2m/440/900-12 N/UHF/UHF/N, no leads	49.99
CMT CM-690	1.9-60MHz 20/150w minimeter	59.99
CMT CM-720N	140-150/430-450 N minimeter	59.99
CMT CMX-2	1.8-200 200w SWR/pwr/rem head	119.99
CMT X-2427	2.4GHz 27el 21db 5' bm N beam	169.99
COB 10 Ultra AT	AM Mobile CB/mag mt ant	39.99
COB 25LTD ST	Sound Tracker AM Mobile CB	79.99
COB CA-72	Amplified CB desk microphone	39.99
COB CP-912	900MHz dig sp spec cordless	59.99
COB FRS-200	Family radio service handheld	49.99
COB HH-35	AM portable CB	44.99
COB HH-36 ST	Sound Tracker handheld CB	49.99
COB HH-40	5w 40 ch CB walkie talkie	59.99
COB HH-70	AM remote CB	74.99
COU MU-510	5w 10ch synth UHF FM handheld	229.99
CSY CD-2	DTMF/CTCSS/DCS dec unit/RS-232	169.99
CSY CD-2P	PC application prog for CD-2	69.99
CUS R-80	80m kit for R-7000 only	129.99
DAV 7415	Wizard II-S weather station	89.99
DIA CP-5	80/40/20/15/10m 200w PEP 15' vert	279.99
DIA CP-6	80/40/20/15/10/6m 200w PEP 15' vert	299.99
DIA CR-214S	2m/220 2.1/3.4db 37" mob ant	49.99
DIA D-505	Mob 40-1500MHz 20db receive ant	119.99
DIA K-300C	Gutter mt w/cable; UHF mount	59.99
DIA K-300KM	Folding gutter mt/coax; NR/SG	67.99
DIA MX-214	2m/220 150/100w w/12" cbis	59.99
DIA MX-3000D	AM-3000, no cables	49.99
DIA SG-7200NMO	2m/440 3.2/5.7db 38" NMO	79.99
DIA X-510NJ	143.5-146.5/428-442 17.2' N	169.99
DRA TNC-270	9600 bps controller; TR-270	249.99
DRA 1594	Remote control for SW-2	49.99
FOR VT-14	2m Ventenna 3' 2.6 db base ant	39.99
FOR VT-15S	Scanner Ventenna 3' 2.6db base	39.99
FOR VT-22	220 Ventenna 25" 2.6db base ant	39.99
FOR VT-44	440 Ventenna 14" 2.6db base ant	39.99
GRU Traveller II	Port AM/FM/SW/LW Rcvr/clock	49.99
GRU Traveller III	Digital AM/FM/SW/LW Rcvr	99.99
HAL P-38	HF DSP modem board	229.99
HUS G6-450-4	6db 470-478 base ant	89.99
HYG 189S	GRK-88 Ground radial kit	39.99
HYG 190S	RRK-88 Roof radial kit	49.99
HYG 191S	160MK-88 160m kit for 188S	89.99
HYG 216S	216SAT 2m 16el 145.9MHz boom	129.99
HYG 381S	19PD 80-10 233' 1-band port dip	149.99
HYG 2400-15S	6240015S Boom mic/headset	49.99
ICO AD-25	Battery charger adapter; 2GXAT	49.99
ICO AG-1200	1.2 GHz mast mt preamp	159.99
ICO BP-3	250ma 8.4v battery	49.99
ICO BP-5	425ma 10.8v high power battery	89.99
ICO BP-5A	425ma 10.8v direct chg batt	89.99
ICO BP-8	800ma 8.4v long life battery	99.99
ICO BP-83	7.2v 600ma battery	79.99
ICO BP-84	7.2v 1000ma battery	99.99

Closeouts - continued AES Price

ICO BP-131	900ma 7.2v batt/mic; W21AT	49.99
ICO BP-171	4.8v 700ma batt; T22A/T7H/W32A	49.99
ICO CR-338	High stability xtal unit; IC-707	69.99
ICO CS-T7	DOS prog software for IC-T7	2.99
ICO CT-16	Satellite interface unit	119.99
ICO HM-14	Scan/TTP microphone	99.99
ICO HM-90A	Wireless microphone	129.99
ICO HS-62	Flexible mobile mic	49.99
ICO UT-30	Tone encoder; IC-707	49.99
ICO UT-89	Tone scan/decode unit; IC-2350H	89.99
JPS NRF-7	Noise reducer and filter unit	129.99
KAN Data Engine	TNC w/no modems	129.99
KAN Data Engine w/DE-1200	modem	189.99
KAN Log Windows	CSS Software	59.99
KEN BT-10	6 AA alk batt case; TH-235A	2.99
KEN DFK-4B	13' rem cable kit; TM-733A	29.99
KEN DFK-7B	Dlx 22' rem cbl kit; TM-733A	49.99
KEN DRU-2	Digital recording unit	139.99
KEN DTU-2	Digital paging unit; TM-541A	14.99
KEN MB-14	Quick release mob mt; TM-742AD	19.99
KEN ME-1	Memory expansion; TH-28A	4.99
KEN MJ-89	Modular mic switch	69.99
KEN PB-36	7.2v 950ma nicad; TH-235A	9.99
KEN PB-37	12v 950ma (5w) nicad; TH-235A	9.99
KEN PG-3E	Cig cord w/filter for DC-1	19.99
KEN TH-42AT	2.5w 440 FM HT/batt/cgr/TTP	229.99
KEN TS-950SDX	Dlx Xcvr w/keyst/DSP/filters	399.99
KEN TSU-5	Prog CTCSS decoder; TS-790A	64.99
KEN TU-7	Prog encoder; 2550/751A/TW4100A	54.99
KEN TU-8	CTCSS tone unit; TS-450S/690S	54.99
KEN UT-10	10w 1.2 GHz module; TS-790A	549.99
KEN YG-455C-1	500 Hz CW filt; TS-450/690	149.99
KEN YK-88S-1	2.4 KHz SSB filt; TS-450/690	69.99
MAG GPS-300	GPS receiver	99.99
MAG GPS ColorTRAK	12ch color GPS w/case	269.99
MAG GPS Tracker	12 ch GPS w/wrist strap	199.99
MAG Meridian XL	GPS/plot/detach ant	199.99
MAX 27-KC	Docking handheld/AM Mobile CB	39.99
MFJ 56B	Pactor/mailbox 128K board; 1278B	79.99
MFJ 56C	Pactor/mailbox 512K board; 1278B	119.99
MFJ 114B	Giant LED desk/wall 12/24-hr clock	59.99
MFJ 119	Giant 24/12 hour LCD/in temp clock	34.99
MFJ 229	270-480MHz SWR analyzer	149.99
MFJ 451X	Morse keyboard interface only	69.99
MFJ 492X	Mem keyer w/8000 char expansion	99.99
MFJ 498X	Dlx CW keybrd w/disp, no keybrd	129.99
MFJ 554X	Dlx oscillator w/281 spkr/550 key	89.99
MFJ 714	2m mobile intermod filter	49.99
MFJ 722	SSB/CW notch filter	59.99
MFJ 1045C	Receiver preselector	49.99
MFJ 1270CT	Turbo packet w/2400 baud	129.99
MFJ 1276	Packet/Pactor controller	139.99
MFJ 1276T	Packet/Pactor Turbo controller	159.99
MFJ 1278BT	Turbo controller/2400/Pactor	269.99
MFJ 1292	Video digitizer for IBM	49.99
MFJ 1522	2m/440 5.5' vertical base ant	69.99
MFJ 1524	2m/440 10' vertical base ant	99.99
MFJ 1526	2m/440 17' vertical base ant	139.99
MFJ 1526N	2m/440 17' N vertical base ant	139.99
MFJ 1532N	2m/440/1.2GHz 8.2' N vert base	89.99
MFJ 1536	6m/2m/440 8.2' vertical base ant	99.99
MFJ 1793	80/40/20m vertical antenna	149.99
MFJ 4312	12A ps w/cig lighter socket	49.99
MFJ 4322	22A ps w/cig lighter socket	69.99
MFJ 8400K	2m receiver kit	59.99
MFJ 8400W	2m receiver wired	69.99
MFJ 8631	3w 220MHz data radio w/223.70	119.99
MFJ 9017	5w 17m CW Xcvr	129.99
MFJ 9115B	9015 Xcvr/tuner/ps/ant pack	299.99
MFJ 9117B	9017 Xcvr/tuner/ps/ant pack	279.99
MFJ 9120B	9020 Xcvr/tuner/ps/ant pack	299.99
MFJ 9600B	9600 baud modem	89.99
MGE HFS-1	10w mobile spkr, 3.5mm plug	19.99
MIR A-1015R	6m FM 2/80w repeater amp	399.99

Closeouts - continued AES Price

ORE WMR-918	Dlx wireless WX strn/rain gauge	329.99
PAL 150-550 KHz	plug-in loop (LF, 1750m)	74.99
PAL 1.6-5 MHz	plug-in loop (160m, 80m)	74.99
PAL MSB-3	Magnetic switch rcv balun	39.99
PAR 50-EL3	6m 3 el beam, 5' boom, 7db	89.99
PIP PK-1M	12-digit pad for surface mtg	49.99
PLY CS6-25	25' 6" copper strap	79.99
PLY CS6-50	50' 6" copper strap	149.99
PLY CS6-75	75' 6" copper strap	219.99
PLY CS6-100	100' 6" copper strap	279.99
PRE SB-752	12vdc 6.5A port batt pwr pack	49.99
RFA Match Alert	VSWR monitor/alarm	99.99
RFA P-1500	1.8-30 MHz dig pwr/SWR meter	149.99
RFA P-2000CW	1.8-30MHz audible (CW) meter	189.99
RFC 2-23	2m FM/SSB 2/30w amp/preamp	69.99
RFC 2/70	2m/440FM 3/30/5/20w HT amp	129.99
RFC VHF1-60	2m 1/60w FM HT amp	119.99
RFL HL-36U	440 .5-12/30w amplifier	99.99
ROH HDBX-40/BXB-7	40' twr/base stubs, 18 sq ft	499.99
SAN ATS-303	AM/FM/shortwave port receiver	69.99
SGC 04-13	Remote kit w/5-way mt & cable	269.99
SGC 52-31	Waterproof military handset	289.99
SGC 52-32	Carbon telephone handset	149.99
SGC 52-47	Shock/military mounting tray	229.99
SGC 54-16	SmartPro 200w 1.6-30 12v tuner	499.99
SGC 70-07	PowerClear add-on DSP unit	299.99
SON ICF-B200	AM/FM emergency radio/light/alarm	59.99
SON ICF-SC1	300 ch pocket scanner	179.99
SON ICF-SW30	AM/FM/SW portable receiver	79.99
SON ICF-SW1000TS	AM/FM/SW Rcvr/tape/ANLP1	399.99
STR CAM-PA-AES	B&W pinhole TV cam/mic/ps	69.99
TRI MT-6+	6 out console surge suppressor	59.99
UNI BC-147XLT-1	16 ch prog scan/instant WX	79.99
UNI BC-3000XLT	400ch 25M-1.3G pocket	349.99
UNI BCT-10	Pre-prog hiway info sys scan	89.99
UNI BCT-12	Pre-prog mob warnng scanner	159.99
UNI HH-940	1w submersible VHF marine handheld	119.99
UNI HH-980	5w 90ch dlx marine handheld/WX alert	159.99
UNI PRO-340XL	40 ch port CB/rubber ant	39.99
UNI PRO-350XL	40 ch handheld CB	69.99
UNI SC-150B	100ch black sport pocket/800	159.99
VEC PS-30F	25A power supply, 30A surge	109.99
VEC PS-50F	35A power supply, 50A surge	169.99
YAE CA-8	2 chg sleeves; NC-50/FT-416/530	1.99
YAE CSC-24S	Case; 23R/33R/73R w/FNB-12S	.99
YAE CSC-35	Soft case; 411E/811/911/FNB17	.99
YAE CT-20	Mic cable for use with MD-1C8	4.99
YAE FEX-736-50	6m module; FT-736R	279.99
YAE FEX-736-220	220MHz module; FT-736R	309.99
YAE FEX-736-1.2	1.2 GHz module; FT-736R	539.99
YAE FNB-4A	500ma 12v battery	62.99
YAE FNB-33	1200ma 4.8v battery	62.99
YAE FNB-38	600ma 9.6v battery	75.99
YAE FNB-40	650ma 6v battery	29.99
YAE FP-712/Vertex	10A switch ps, 12A surge	79.99
YAE FRC-4	DTMF pager unit; FT-5200/6200	2.99
YAE FRC-6	DTMF pager unit; FT-2500/7400	4.99
YAE FT-100	Mini HF Xcvr/6m/2m/440/DSP/TTP	*899.99
*Price w/instant coupon; coupon until gone!		
YAE FT-1000MP	9-band Xcvr/EDSP/tuner/ps	2399.99
YAE FTS-8	Encoder/decoder; 09-series	4.99
YAE FTS-8	Encoder/decoder for FT-736R	62.99
YAE FTT-4	DTMF (TTP) unit; FT-23R/33R/73R	4.99
YAE FTT-12	16-key keypad/dec/DVRS; FT-50R	19.99
YAE MH-27A8J	TTP mic/modular plug; early 2500M	60.99
YAE MH-27B8	8-pin TTP mic; FT-5200/6200	65.99
YAE MH-29A2B	LCD disp spkr/mic; 530/51R	49.99
YAE MH-39A6J	Extra reg mic; FT-8500	89.99
YAE MW-2	Wireless remote control mic	29.99
YAE TCXO-1	Temp comp xtal osc; FT-1000	179.99
YAE VC-22	Headset w/VOX	62.99
YAE XF-110CN	455KHz 250Hz CW filt; FT-900	129.99
YAE YSK-900	20' rem mtg kit/trnk mtg bkt; FT-900	68.99
YAE YSK-8500	Rem separation kit; FT-8500	69.99





GPS-12XL Personal Navigator™ for the Extreme Outdoor Enthusiast Has a 12 channel receiver with external antenna for fast, accurate position fixes in the toughest conditions like tree canopy and urban obstructions. Rugged, compact case ideal for boaters, hunters and hikers. 500 user waypoints with alphanumeric name and user comments, and 20 reversible routes of up to 30 waypoints each. TracBack™ navigation turns your track log into a route back home. Nine waypoint alarms. Over 1000 track log points, position averaging, emergency erase, and cloning features. Up to 12 hours operation on 4 "AA" batteries **\$219.99**

GPS-12CX Color Display Personal Navigator™ for the Outdoor Enthusiast Nine built-in languages including French, German, Portuguese and Spanish. 2,048 track log points. Selectable position formats including MGRS and user-define grid. Provides heading, track, sunrise and sunset, ETE, ETA and other calculations. User selectable audible settings, TracBack™. Up to 36 hours of battery life... **\$269.99**

NavTalk™ Personal Navigator™ and Cellular Mobile Combines GPS with cellular technology into one handheld unit. During travel, location is displayed in real time on a built-in map. Send your exact position and have it displayed on another NavTalk unit. **Cell phone:** Customized phone book • One-touch speed dial • Built-in pager; • One-touch emergency dial (subscription to roadside assistance required) **GPS:** Shows interstates with exit info, cities, airports, etc. Plug into a PC and download from optional MapSource™ CDs [U.S. Roads and Recreation (010-10215-00) or World Map (010-10215-01 Special Order)]..... **\$399.99**

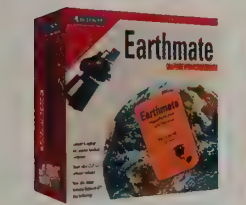
GPS-III Plus Personal Navigator™ Dash mount. Features road maps without plug-in cartridges. Selectable vertical or horizontal screen display. Dedicated keys for zooming from 0.2-360 miles, diagonal panning, auto start/stop trip timer, average/maximum speed recordings. Rocker keypad, backlit LCD display, full featured moving map plotting, user selectable navigation screens for compass or graphic highway guidance. Takes download data from MapSource CDs **\$369.99**

StreetPilot Dashboard Mount Built-in map of the Americas with state and country boundaries, lakes, rivers, cities, U.S. state and interstate highways and some local thoroughfares. Accepts GARMIN cartridges showing residential streets, addresses and points of interest. Features: Large high resolution 240 x 160 pixel display; Three-level bright amber backlit screen and keypad; Automatic turn by turn guidance with manual route selections; Automatic waypoint and route naming; Storage for 100 waypoints; Trip planning and computer. Zoom key - 120 ft. to 800-mile range; Dashboard screen showing current trip segment, distance, direction; Clock and arrival alarms. Up to 16 hours on 6 AA batteries.. **\$469.99**

eMAP DELUXE Electronic Map Contains 12-parallel-channel GPS receiver and internal patch antenna in a compact design with built-in basemap showing cities, interstates, exit info and more. A large, high resolution, backlit screen provides a clear picture. Dedicated zoom keys with unique rockerpad design for easy one-hand operation. • Find cities, nearest exits and waypoints • Built-in trip computer provides odometer, stopped/moving/total time, moving/overall average and maximum speed • Map page displays direction pointer, speed, time, distance/time to go and trip distance • Save up to 500 important sites • 2000 track log points • Up to 12 hours operation on 2 "AA" batteries. Package includes interface cable, blank 8MB data card, wrist strap and guide • 2.4" x 5.5" x 0.8", 6.7 oz. **\$299.99**

eTrex (yellow) 12-parallel-channel GPS receiver and internal patch antenna packaged in a sleek, waterproof case. Operating buttons on both sides allow larger display. Simple menus and logical operations make it easy to mark your position under any conditions. Navigation using compass or map pages. • Dedicated zoom keys for map page • 500 User waypoints with name and graphic symbol • 1 route with 50 waypoints • Resettable trip computer • Automatic track log, 10 saved tracks to retrace your path • Up to 22 hours of use with 2 "AA", alkaline batteries • No memory battery required • 4.4" h x 2" w x 1.2" d, 5.3 oz..... **\$145.99**

eTrex Summit™ Hiking Companion (grey) Similar to the eTrex above but this "go-anywhere" GPS includes a barometric altimeter and an electronic compass for accurate elevation, direction and location reporting..... **\$249.99**



Earthmate™ GPS Receiver for Laptop PC A GPS receiver from DeLorme featuring a slim design, the latest GPS chip technology from Rockwell, enhanced performance, and award-winning Street Atlas USA 6.0 software*. Connect to laptops and Windows® CE or 3Com® Palm Computing handhelds. Use the new Solus™ PRO handheld mapping and routing application available separately from DeLorme..... **\$159.99**

***Street Atlas USA® 6.0** is America's most detailed street-level mapping software including address-to-address routing, enhanced GPS features including GPS voice navigation, expanded exit service information, and compatibility with Window®, CE and 3Com® Computing handheld computers. Lightning-fast search by address, place name, area code and exchange, zip code or lat/long. Create a sharp, detailed Travel Plan with your stops, driving time, and more. Connect to online weather, construction, and other useful travel information.



Global Positioning Satellite (GPS) brings satellite navigation within reach of everyone! For navigation, hunting, traveling, etc. It tells you where you are and how to get back. Each Magellan GPS includes a powerful 12 parallel channel receiver, wraparound rubber armoring, "EZstart" operation, auto averaging and a water-proof design.



MAP 330 GPS The most memory in its class! Designed for the avid outdoorsman and mobile professional who demand supreme performance and functionality. The built-in 8-megabyte base map includes worldwide political boundaries and U.S. cities highways, major roads, national parks, waterways, and railways. And with 8 Megabytes of up-loadable memory, you can plan detailed, cross-country routes without having to visit your PC every other state. View your navigation information on any of the four graphic screens presented on a large, high-resolution display. With a powerful 12-parallel channel receiver and quadrifilar antenna, the MAP 330 provides outstanding lock-on tracking in a vehicle, boat, on foot, etc **\$249.99**

GPS-300 Satellite Navigator A pocket-sized GPS featuring water-proof construction, impact-resistant rubber armor and a quad antenna. EZstart, go-to and other features show where you are, take you places and bring you back again. It holds 100 landmarks and a 10 leg route. It provides three screens displaying distance, bearing, heading, steering, speed and time. Also included: latitude/longitude, map datums and 951mph maximum speed operation. The 9oz. unit runs on 2 "AA" batteries for 24 hours and comes with lanyard **Closeout \$99.99**



GPS-315 Navigates to 20,000 major international cities or brings you back to 500 user-entered locations. Nine screens show bearing, heading, distance and speed. A 12 parallel-channel receiver offers performance under tough conditions. Auto-averaging gives your position while standing. Also: 1200-point Track, BackTrack, best fish/game time, 10-year back-up battery, PC up/download and simulator. The 6.4 oz. unit comes in a waterproof, shock-resistant case. It runs on 2 "AA" batteries for 15 hrs. Works with mapping software.. **\$149.99**



GPS-320 GPS Navigator with Nautical Navaid Data Base and Worldwide Cities A fisherman's full-featured personal navigator with a large database of cities and regional marine aids and memory to store up to 500 waypoints and/or landmarks. Four navigation screens show direction, path traveled, and distance. Other features include: A 12 parallel-channel receiver, EZstart operation, 1200-point SmartTrack, BackTrack, best fish and game time, sunrise/set info and mapping software compatibility. Comes with a 10-year back-up battery and operates on 2 "AA" batteries .. **\$199.99**

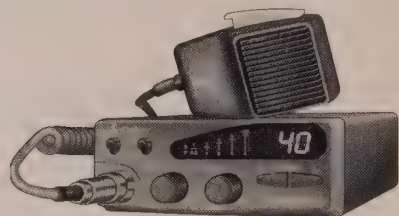


CB RADIOS

Technology that dramatically improves the transmission and reception of radio signals. "Cuts Noise Coming In... Strengthens Signals Going Out!" The result is a cleaner, clearer sounding radio with more "powerful" transmissions and less static or noise on reception.



148NW ST Full Featured AM/SSB Mobile CB Radio 12W PEP SSB RF output - increases range capabilities with SSB oper. • 4W AM RF power (FCC max. allowed) • 120 channels - full 40 and 80 of SSB oper. • Dual conversion AM receiver - designed to maximize freq. response & image/spurious rejection • **Additional Features:** SoundTracker™ system, NightWatch™ dimmer control, USB/LSB/AM oper., Digital channel indicator, RX/TX indicators, Switchable noise limiter & blanker, RF-gain control, Hi/Low tone switch, PA capability, SWR indicator, Instant channel 9 • 7¼" x 2¼" x 8¾", 6 lbs..... **\$179.99**



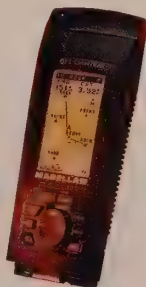
19DX II Compact AM Mobile CB Radio Sculpted features & muted graphics giving it a dynamic look complementing any vehicle of today • Electronic tuning/40 channels • Digital channel display • 4W RF output power - (max. FCC allowed) • Instant channel 9 - access to National Emergency Channel • Combination S/Rf meter • CB/PA switch - selects CB oper. or PA operation for communicating outside the vehicle • 4¾" x 1¾" x 6¾", 2½ lbs..... **\$49.99**

MAGELLAN

Navigation & Communications

GPS

GPS ColorTRAK Satellite Navigator Featuring the world's first high-resolution, color display in a portable GPS receiver. Outstanding lock-on tracking with eight graphic navigation screens including a real-time multiple route plotter with adjustable scale. Stores up to 500 user-entered locations & 20 reversible routes with 30 legs. The detachable super sensitive antenna provides superior tracking ability. Backlit display and keypad. Operates 30 hours on 4 "AA" batteries. 10-year memory back up battery. Includes case, wrist strap, battery and User/Quick reference guides..... **Closeout \$269.99**



900MHZ CORDLESS PHONES

EXP-7902 Cordless Phone with Voice Scramble 40 channel auto-scan • Voice scramble security • Ultra-Clear plus noise reduction • 10 mem. • 3 one-touch priority keys • 7 hrs talk time • Long-life battery • 32 digital redial • Page/fine feature • Desk/wall mount **\$39.99**



EXA-7950 Cordless Telephone w/Digital Answering System Integrated digital answerer • 40 channel autoscan • Time and day stamp • Remote message retrieval • 15 minute record time • Base speakerphone • 10 number memory dialing • 3 one-touch priority keys • 14-day stand-by • Desk or wall mount..... **\$69.99**



EXS-9960 Digital Spread Spectrum Cordless Phone The ultimate in cordless phone privacy • Caller I.D. and call waiting I.D. (subscription required) • 20 number memory • 3-line backlit display and lighted keypad • Battery back-up/recharge system allowing storage of optional battery in base..... **\$99.99**



EHD-1200GB Harley Davidson® 900 MHz Cordless Exclusive telephone crafted by Uniden to replicate the Harley gas tank. 900MHz extended range • 40 channel autoscan • 10 number memory dialing • Three one-touch speed dial keys..... **\$49.99**



uniden®



CB RADIOS

GRANT-LT AM/SSB Mobile CB Radio Dynamic Squelch Control (DSC) for improved clarity • Full PLL synthesized 40 channel operation • Single side-band, 12W PEP (AM, 4W) • LED Channel indicator • Backlit control knobs • Microphone gain, RF gain and clarifier controls • NB/ANL switch • PA/CB switch, dimmer control • Multifunction meter - indicates relative RF output, modulation, SWR and receive signal strength • TX/RX indicator, tone HI/LO switch • 7¾" w x 9¾" d x 2¾" h, 5 lbs **\$169.99**

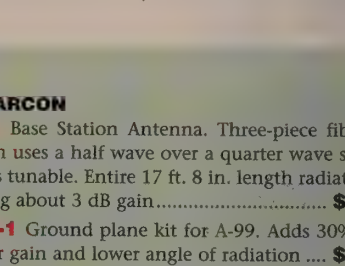


PC-78XL AM Mobile CB Radio Full PLL synthesized 40 channels • DSC - Dynamic Squelch Control • Instant channel 9 • Microphone and RF gain controls • Delta tune control - Fine tunes received signal and reduces interference • Noise blanker and automatic noise limiter • PA/CB switch • Dimmer control • TX/TX LED indicators • Antenna warning LED - lights when high SWR condition is present • 7¾" w x 8¾" d x 2¾" h, 4 lbs. 3 oz..... **\$109.99**

PC-78LTW Same basic features as the PC78XL with the addition of NOAA Weather Channel reception with Weather Alert..... **\$129.99**



PRO-520XL Compact 40 Channel AM Mobile CB Radio 4W • Instant channel 9 access • 4-segment S/Rf meter • TX LED • LED channel indicator • RF gain • PA switch • Automatic noise limiter • Only 4¾" w x 6¾" d x 1¾" h, 1 lbs. 10 oz..... **\$59.99**



RECOMMENDED ANTENNAS FOR CB

COBRA
HGA-1000 Magnet mount base loaded mobile antenna with coax and connector..... **\$24.99**
HUSTLER
HQT A 55 inch top loaded whip with Mirror Mount bracket. Comes with 12 ft. cable with PL-259 connector. Chrome with a white coil..... **\$27.99**
HQ-27M A 55 inch top loaded whip with Trunk-lip Mount. Comes with 15 ft. cable and PL-259 connector. Chrome with a white coil..... **\$36.99**
LARSEN
NMO-27C Base loaded mobile..... **\$33.99**
NMO-TLP Low profile trunk mount for NMO-27C. Comes with 17 ft. coax and PL-259..... **\$29.99**
NMO-MM Magnet mount for NMO-27C. Comes with 12 ft. coax and PL-259 connector..... **\$31.99**

SOLARCON

A-99 Base Station Antenna. Three-piece fiberglass design uses a half wave over a quarter wave section, and is tunable. Entire 17 ft. 8 in. length radiates producing about 3 dB gain..... **\$64.99**
GPk-1 Ground plane kit for A-99. Adds 30% more power gain and lower angle of radiation **\$39.99**

WILSON

W-1000 5 ft. base loaded mobile antenna. Available in three mount configurations. All come with 18 ft. cable and PL-259 connector.

ROOF thru-hole mount..... **\$54.99**
TRUNK mount..... **\$62.99**
MAGNET mount..... **\$72.99**



FRS FAMILY RADIO SERVICE

For non-commercial use, FRS shares GMRS frequencies but you do not need a license to operate. Uses include: camping, trips to the beach, hiking, jogging, parks, amusement spots, skiing, mobile caravans, any place where two or more people need to stay in touch. Power – 100mw to 0.5W ratings of handheld portables allow range of up to 2 miles, line of sight. **FRS Channels:** 462.5625, 462.5875, 462.6125, 462.6375, 462.6625, 462.6875, 462.7125, 467.5625, 467.5875, 467.6125, 467.6375, 467.6625, 467.6875, 467.7125MHz

KENWOOD



UBZ-AL14BK (left) 500mW output • 14 FRS channels • Battery saver function • Lamp function • Call tone transmit function • Audible low battery warning beep/ blinking • Up to 30 hrs operation with 4 “AAA” alkaline cells • 3.75”h x 2.31”w x 1.19”d **\$49.99**

UBZ-LH14BK FreeTalk™ (right) 500mW • 14 FRS channels • 38 talk groups (CTCSS) • Privacy talk voice • 4 call ring tones CORDS (In-Range Detect System) • Battery saver and auto power off • Low battery alert indicator/beep • Up to 40 hours operation with 3 “AA” alkaline cells • Only available in black • 3.5”h x 2.25”w x 1”d **\$89.99**

ICOM

IC-4008A 500mW • 14 channels; 38 Group channels • “Call-Ring” and “Smart Ring” functions provide telephone-style ring with 10 different tones • Auto transponder function automatically checks station availability and alerts via function display indication • Fold-down antenna • Water resistant • Requires 3 “AA” alkaline batteries – 30+ hrs • 4½”h x 2¼”w x 1”d.. **\$79.99**



YAESU

VXF-10 Adventurer 500mW output • 14 channels • Digital coded squelch • Automatic range transponder system (ARTS) – ensures staying in communication range • Receives nine NOAA VHF weather channels • Uses 3 “AA” alkaline or Ni-cad batteries (30 hrs) • 4½”h x 2¼”w x 1”d **\$79.99**



MOTOROLA

HEADSET

53725 Headset with Swivel Boom Mic Allows you to clearly hear messages in high noise areas or in quiet environments without disturbing others. Have the flexibility to transmit messages without removing radio from belt or case. Enjoy hands-free talk when used with a Voice Activated Transmission (VOX) capable TalkAbout..... **\$14.99**



MOTOROLA

FRS RADIOS

Common Features:

38 interference eliminator codes • Built-in hands free operation (VOX) – when used with optional audio accessory • Time-out timer • Transmit light • Audible low battery alert • Operators manual • 3¼”h x 2¼”w x 1¼”d x 6½”h with antenna • 1 year warranty

TalkAbout 250

Additional Features:

Scan • “Talking” channel confirmation • Battery meter • LCD display • Audio accessory connector • Removeable belt clip

53543 (Camo) **\$89.99**
53590 (Blue)..... **\$79.99**
53592 (Black) **\$79.99**

TA-280SLK (NiMH battery)

Additional Features:

Programmable scan • Multiple audible call alerts • Multiple VOX sensitivity levels • Electroluminescent display • Lock/light button • Auto-power off • Battery meter indicator • Single pin audio accessory connector • Removeable carry holster • Alkaline battery tray • 6.05oz with three AA batteries

53716 (Black) **Closeout \$99.99**



53770 FR50 Operates on three AA batteries • 14 channels • Carrier squelch • Audible call alert • Side push-to talk (PTT) • Backlit LCD display • Audible low battery alert • Removable belt clip • Single pin audio accessory connector • Time-out timer • Owners manual • One year warranty • 4.33”h x 2.36”w x 1.30”d, 6.6 oz..... **\$49.99**

GMRS GENERAL MOBILE RADIO SERVICE

A personal radio service available to an individual with the proper FCC license. It is a two-way voice communication service to facilitate the activities of the individual's immediate family members. You can discuss your own commercial and/or family business activity. Higher powered two to five watt hand-held portables allow communications over 1 to 5 miles. **Interstitial Frequencies:** 462.5625, 462.5875, 462.6125 462.6375, 462.6625, 462.6875 462.7125 MHz **Primary Frequencies:** 462.5750, 462.6250 MHz “Emergency” Frequency: 462.6750MHz

GMRS RADIOS

Common Features:

38 Interference eliminator codes • Built-in VOX operation (when used with optional audio accessory) • Scan capability • Voice-assisted programming • Low battery alert • Transmit light • Audio accessory connector • Removeable spring action 2.5” belt clip • Rechargeable battery • 10 hour charging adapter

TalkAbout DX

• 2W • 5¼”h x 2¼”w x 1¼”d, 11.1 oz

53544 (Grey) **\$189.99**

TalkAbout DXDPS

Additional Features:

• Alkaline battery tray (6 AA batts. not included) • 2W • 6¼”h x 2¼”w x 1¼”d, 11.7 oz.

53547 (Grey) **\$199.99**



maxon

GMRS RADIO

GMRS-21X GMRS Radio 1 Watt RF output • 2 channels:–462.575 and 462.625MHz • Includes rubber duck antenna, rechargeable NiCad battery pack, AC/DC wall charger, belt clip and four AA alkaline battery holder • 5¼”h x 2¼”w x 1¼”d..... **Closeout \$99.99**

49MHz FM PERSONAL COMMUNICATORS

Low power, 1/4 mile average range • Dual conversion super-heterodyne receiver provides crisp, clear voice transmission • Compatible use for group communications • Push-to-talk or voice activated (VOX) - talk-to-transmit • No license required • Channels: 49.830MHz, 49.845MHz, 49.890MHz, 49.860MHz, 49.875 MHz



MX-49SX A single channel unit including a lightweight adjustable headset with retractable whip antenna and boom microphone with windscreen. Uses only one of first 3 channels (see above) • LED power indicator • battery charger jack • Range up to 1/4-mile • Uses two “AA” alkalines or rechargeable nicads • 5”w x 2½”h x 1”d, 9 oz..... **\$29.99**



MX-49FX The unique earphone and microphone pick up voice vibrations from the ear canal for transmit audio and also provide received audio • Will not interfere with helmets • 5 selectable channels • Built-in antenna gives up to 1/8-mile range • Remote PTT button & channel selector. Uses three “AA” batteries. 5½”w x 3”h x 1”d 6 oz **\$49.99**



MX-49HX Great for motorcycling, snow mobiling, etc. The helmet adaptable headset has a whip antenna and boom microphone with windscreen • 5 selectable channels • VOX or PTT with on-unit or remote switch • Front mounted off/on, volume, VOX sensitivity and channel selector • Jacks for optional passenger intercom headset • Uses three “AA” batteries • 5½”w x 3”h x 1”d, 6½ oz ... **\$49.99**

PC-50 Handheld

Communicator Operate with or without detachable headset • Boom mic, windscreen and whip antenna included • 5 selectable channels • Call-tone alerts person that you want to contact • Compatible with all Maxon 49MHz radios • Uses 3 “AA” batteries • 6”h x 2¼”h x 1¼”d, 8.2 oz **\$49.99**





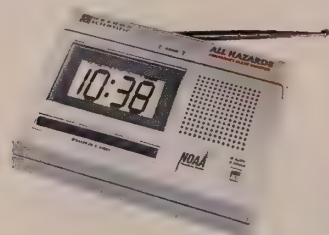
NOAA
Weather Radio

ALL HAZARDS WEATHER RADIOS

Monitors 24-hr weather forecasts and alerts • Scans all NOAA channels • Monitors U.S. emergency alert system with auto activation • Dual LED power/alert indicator • Digital clock land alarm with snooze

WR-8000 Pocket-sized (right) Ambient temperature display • audio/visual freeze alert • LCD screen with backlighting • Water resistant case with compass • Belt clip • Uses 3 "AA" batteries, not included • 2 1/2" w x 1" d x 6 1/2" h, 8 oz. **\$39.99**

WR-102 Portable S.A.M.E. Weather Radio (left) A handheld all-hazards weather radio that receives and displays alerts, watches and warnings that apply only to a local area using S.A.M.E. (Specific Area Message Encoding) technology **\$49.99**



WR-3300 Desktop or Bedside Operates on 3 "C" batteries (not included) or with included AC power adapter • Large digital clock LCD • Wall mount or desktop • 5" L x 4" W x 2" H, 6 oz. **\$29.99**

DAVIS

WEATHER STATIONS

Gives many measurements and the ability to download and graph data on your PC.

7440 Weather Monitor II® This weather station combines all weather monitoring function and 12 or 24 hour clock with date into one package. Shows them on a back lit, 1 1/2" x 4 3/8" LCD display. Temperature: Outside, -50 to 140°F; Indoor, 32° to 140°F Wind: Direction in 1° or 10° increments • Speed to 175mph • High wind speed & wind chill to -134°F Barometer: Barometric pressure with memory recall and trend arrow Humidity: Inside 10%-90% (outside optional) • High and low Alarms: Temperature, wind speed, wind chill, humidity, time and barometric trend Features: Scans selected functions • 115VAC • Battery back-up • Desk, shelf or wall • Size: 5 1/4" x 5 1/2" x 3" ... **\$269.99**

7859 External Temperature & Humidity Sensor For the 7440; measure outside humidity, dew point and temperature. Comes with 40' cable .. **\$109.99**



7425 Weather Wizard III® Monitor indoor and outdoor conditions on a 1 1/2" x 4 3/8" LCD display. Measure daily & accumulated rainfall with optional rain collector. Optional Weather-

Link software will process and store weather data through an IBM® compatible or Mac®. Includes anemometer, external temp. sensor, junction box, cables and AC adapter. Temp: Indoor, 32°F to 140°F • Outdoor, -50° to 140°F • High and low Wind: Direction in 1° or 10° increments • Speeds to 175mph • Wind chill to -134°F Alarms: Temperature, wind speed/chill, time Other: Scans selected functions • Metric or U.S. • 115V AC • Battery back-up • Desk, shelf or wall • 5 1/4" x 5 1/2" x 3" ... **\$169.99**

7852 Rain Collector II For 7440, 7425 & 7415; read both daily and accumulated rainfall in 0.01" increments. Comes with 40 ft. cable **\$69.99**

7400 Perception II® Monitors indoor climate, looks similar to 7425. Functions: Temperature 32°F-140°F • Barometric pressure w/memory recall • Humidity • Highs & lows recorded with time & date • Alarms: Temp., humidity, time, barometric change • 12/24 hour clock with date • Backlit display **\$129.99**



WEATHER STATIONS

WMR-918 Cable Free™ Weather Station Innovative wireless outdoor sensors with 300 ft. range operates on solar power for simple installation and sophisticated ease. Track and record over 20 separate weather conditions by a press of the touch-sensitive jumbo LCD display screen **Closeout \$329.99**



WM-918 Complete Weather Monitoring Station Monitors over 20 weather and environmental conditions. Sensor range up to 300'. Comes with all wiring and accessories: Self-dumping electronic rain gauge; outdoor temperature and humidity sensor and anemometer for wind speed and direction. Desktop control panel displays clock, calendar, alarm, and weather readings. Also features weather forecasting system with prediction icons displaying local 12 and 24 hour forecasts. PC connections with optional kit. Uses 8 AAA batteries, AC adapter included. 7" l x 4 3/4" w x 1 1/2" h, 14.8 oz. **\$199.99**

SW-918 PC software and cable; WM-918 **\$29.99**



WEATHER CLOCKS

RM-116E Exactset™ Radio Controlled Clock (left) The most accurate of alarm clocks. Sets itself automatically by receiving time signals from the U.S. Atomic Clock. Features blue HiGlo™ backlight LCD, snooze, day/month/seconds and automatic adjustment for Daylight Savings Time **\$39.99**

BA-812E Weather Clock (right) Unique bedside or desktop alarm clock features automatic weather forecasting technology with easy-to-understand graphical weather icons. Displays the indoor room temperature and features a HiGlo™ backlit LCD ... **\$49.99**



SECURITY ITEMS

PE-319 Pedometer with Personal Security Stay at ease while exercising away at home. This pedometer features a 120dB panic alarm for personal security and emergency. Displays elapsed workout time, distance walked and a 12/24 hour clock on its backlit 2-line LCD display.. **\$29.99**

Used & Demo

Equipment lists

Updated regularly on the web.
Check them out and order **On-line**

0281 Wind Wizard™ Wind Speed Indicator Handheld unit accurately measures wind speed from 0-60MPH in miles/hr, meters/sec, Beaufort. No batteries required **\$46.99**

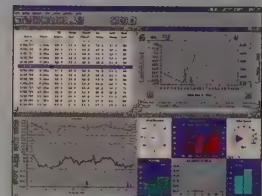


0271 TurboMeter™ Wind Speed Indicator Turbine suspended on sapphire jewel bearings responds to lightest winds • 3-digit display • Reads speed in miles/hr, knots, feet/min, meters/sec • Requires 3 "AAA" batteries (not incl.) **\$99.99**

SOFTWARE

7862/7866

WEATHERLINK® Windows® or Mac platform. Links Perception, Weather Wizard, or Weather Monitor to a computer. Create graphs, calculate average conditions, generate summaries, analyze trends, etc ea. **\$139.99**





74-109 WEATHER MAX PLUS Weather/All Hazard VHF Radio Up-to-the-minute weather and "hazardous conditions" information. Equipped with all N.O.A.A. channels in the 162MHz range for maximum reception of local weather and hazardous conditions reports (fire, earthquakes, radiation, etc.) In the event of severe weather or hazardous situation, a warning signal is broadcast and the radio's "alert" is automatically activated, sounding a 90-decibel siren, voice warning or flashing an LED alert. There is also an accessory jack for keying add-on alert devices such as strobe lights, buzzers, etc. Plugs into a standard 120 VAC outlet. Built-in jack permits powering from any 12 VDC vehicle. With a 9V battery backup system, it operates during power outages or outdoors. 1 1/2" h x 6 1/4" w x 4 3/4" d... **\$39.99**



74-200 Digital Weather/Hazard Alert Monitor Provides 24-hour National Weather Service information from 7 different NOAA channels for maximum capability up to 50 miles. Eight-character LCD displays up to 56 types of S.A.M.E. watches or warnings and monitors status of user selectable warning system. Weather Command button switches from alert mode to full monitoring. Clock displays time and date and has alarm functions. Telescoping antenna, external antenna input and alert device output jacks. Operates from 9-14VDC and 117VAC with supplied adapter. Accepts one 9V battery for backup during outages. 7 3/4" w x 2 1/2" h x 5" d, 18 oz **\$59.99**



74-210 Digital Weather/Hazard Alert Monitor with S.A.M.E. Provides the latest storm or hazard safety information only in areas you specify, county-by-county. Digital tuning provides pin-point accuracy for 7 NOAA frequencies, covering all US/Canada weather channels up to 50 miles. The digital FM radio with five memory channels automatically switches to alerts when they occur. The digital readout also displays up to 56 types of watches and warnings as well as the radio frequency and time of day. Operates from 117VAC and 9-14V DC with 4 "AA" batteries for back-up. Accessory jack makes it easy to add an antenna, strobe light, pillow vibrator or any X-10 accessories. 7" w X 5" d x 2" d... **\$89.99**



SELF-POWERED PRODUCTS

No batteries or external power needed. Perfect for activities, emergencies, power outages. Inside, the *Freeplay Generator*, a wind-up B-motor carbon steel spring, drives a generator thru a transmission to produce operating voltage. A short wind-up yields up to an hour of listening, depending on model & volume. Built-in antenna, external power & headphone jacks.

FPR-2 (right) AM & FM broadcast band coverage. Each wind-up provides 60 minutes of operation. 8" h x 11 1/2" w x 8" d, 5 lbs, 5 oz **Closeout \$49.99**

FPR-1B (left) AM & FM broadcast plus 5.8 -18MHz. Each wind-up gives 30 minutes of operation. 10" h x 13 1/2" w x 5 1/2" d, 6 lbs, 3 oz **Closeout \$49.99**

AC ADAPTER for BayGen FPR-2 only **\$10.99**

HEADPHONES for BayGen FPR-2 only... **\$14.99**

SWL ANTENNA Indoor SW antenna..... **\$19.99**

Same as FPR-2 above, with the addition of a solar panel that powers the radio when exposed to sunlight. It powers off of a solar panel alone in direct sunlight, but as light decreases, the radio automatically draws from the spring generating mechanism.

FPR-2SC Clear case, shows off the works **\$79.99**

FPR-2SM Grey case..... **Closeout \$49.99**



maxon
SYSTEMS



WX-70 Weather Monitor Receive up-to-the-minute National Weather Service (N.O.A.A) broadcasts of local weather conditions for the U.S., Puerto Rico and the U.S. Virgin Islands. Tunes all 7 N.O.A.A frequencies. Three severe weather "Alert" warning modes: "VOICE", 10 Second SIREN, or Flashing LED. Operates from supplied 110V AC adapter; uses a 9V battery for back-up power in the event of an electrical outage. 5 3/4" w x 4 3/4" d x 1 1/2" h, 13 oz **\$39.99**

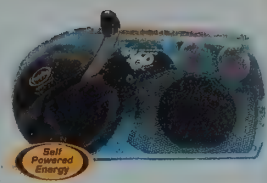
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WX-100 Weather Radio

• 7 channel • S.A.M.E. alert • Backlit LCD display
• Weather key • Warning/watch indicators • Alarm clock • 9V battery backup **\$59.99**

S360-BL (clear blue), **S360-C** (clear) **Freeplay® 360** Covers AM and FM broadcast bands. Sixty turns provide full energy storage. Can be wound without interrupting radio reception. The solar panel will power it all day in direct sunlight. With its internal power storage system, it automatically saves all available spring and solar energy giving 15 hours of play-time when fully charged. Can also be charged with AC/DC wall adapter **\$69.99**



FPR-2SGSW Global Shortwave Covers AM and FM broadcast band and 5-18MHz. Plays up to an hour under spring power alone. With its solar panel, the radio saves spring power by switching automatically to make use of all available light. It plays all day in direct sunlight and it can also be powered by an optional AC/DC adapter **\$99.99**



Freeplay® Lantern Working off its own internal generator or rechargeable battery. Each 30 sec. wind provides 3 minutes light or charges battery. Includes a 1Hz flasher unit. Battery mode

gives 2 hours of light. Auxiliary power socket provides 3V DC @ 350mA. Bright, high pressure Xenon bulb. Weather resistant, made of nylon and reinforced materials. 7" x 10" x 5 1/2", 4lb. 7oz.

FP-SL Yellow case (shown)..... **\$69.99**

FP-SL-CBL Clear blue case..... **Closeout \$39.99**

BLUB Extra xenon bulbs (2 -pack)..... **\$9.99**

FPS-10 Patch cord for 3V aux. output..... **\$6.99**

Emerson

ESR-220
Solar and
Dynamo
Powered
Radio and



Flashlight Built-in NiCad battery recharges using the solar panel or dynamo generator. Install three "AA" batteries for back-up only. Can also be powered and recharged using optional AC adapter • Bright beam flashlight with two modes: steady ON or flashing ON and OFF • Warning siren feature can be used alone or with flashing light • AM/FM radio has built-in antenna • 8 1/2" x 3 1/2" **\$29.99**

SONY

ICF-B200

Emergency AM/FM Radio Turning generator handle for one minute provides 30 minutes listening time. Also operates with 2 "AA" batteries. Includes emergency light and audio beacon. Orange color stands out in foliage making location easy. Water-resistant. Headphone jack. 3 1/2" x 6 1/2" x 2 1/2", 1 1/2 oz **C/O \$59.99**



uniden®



HANDHELD SCANNERS

BC-60XLT-1 Handheld Scanner (left) 30 programmable channels, 10 bands – cover 29-512MHz • LCD channel display • Programmable chain search • One-touch weather • Lockout • Memory backup • Keypad lock • Scan delay • Manual channel access • Track tuning • Keypad lock • Uses four AA alkaline or nicad rechargeable batteries, or operates on AC with included 110V AC adapter • 2 1/2" w x 6 1/4" h x 1 1/2" d, 10 1/2 oz. **\$99.99**

BC-80XLT Handheld Scanner (left) 50 programmable channels, 11 bands, 5 banks – cover 29-956MHz (cell blocked) • 5 priority channels • One-touch weather • Manual channel access • Bands search • Full frequency LCD display • Uses four AA alkaline or nicad rechargeable batteries, or operates on AC with included AC adapter • 2 3/4" w x 6 1/4" h x 1 1/2" d, 10 1/2 oz. **\$149.99**

BC-3000XLT Handheld Scanner (middle) 400 channels – 12 bands, 20 scanning banks • 10 priority channels • VFO control – continuous band coverage (25-1300MHz, cell blocked) • TurboScan™ and search • One-touch weather • Auto-store • Channel lockout • Includes rechargeable NiCad and charger • 2 1/2" w x 1 1/2" d x 6" h, 12 1/2 oz. **Closeout \$349.99**

BC-245XLT TrunkTracker II Handheld Scanner (right) 300 programmable channels, 12 bands including Aircraft and 800MHz – covers: 29 to 956 MHz (cellular blocked) • Trunk tracking technology: trunk scan and search, truck lock out, trunk delay, and 10 trunk scan list • Programmable search • Memory backup • Manual channel access • Pre-programmed service search • Channel lockout • 10 priority channels • Rechargeable NiCad battery and wall charger • 2 1/2" w x 6" h x 1 3/4" d, 12 1/2 oz. **\$229.99**

SC-180B Sportcat Hear car and pit crew action at auto races, or the cockpit at air shows, or use the Sportcat like a traditional scanner to keep up with police, fire, emergency and rescue. • 100 programmable channels, 12 bands/800MHz (cell blocked)/Air, 10 bands • 10 priority channels • Twin TurboScan™ and search • Manual channel access • Instant weather • Full frequency, backlit alphanumeric LCD • Rechargeable NiCad and wall charger • Includes sports frequency guide, AC adapter, rubber antenna, belt clip and ear-phone • 2 1/2" w x 1 1/4" d x 6" h, 11 oz. **\$189.99**



BEARCAT SCANNERS

CLT Scanners The first scanners with a built-in AM/FM radio and alarm clock.

BC-244CLT Clock/Alarm • 30 programmable channels, 10 bands • Full frequency LCD display • Channel lockout • Memory back-up • Manual channel access • One-touch weather **\$99.99**

BC-248CLT AM/FM Radio with 20 presets • Clock/alarm with snooze • 50 programmable channels, 10 bands, 5 banks of 10 channels each • One-touch weather • Full frequency display • Auto squelch • Lockout • Memory back-up • Manual access • Delay • 5 priority channels..... **\$109.99**

BC-278CLT AM/FM Radio with 20 presets • Clock/alarm with snooze • 100 channels, 12 bands, 5 banks of 20 channels each • 800MHz coverage (cellular blocked) • One-touch weather with S.A.M.E. weather alert • Full frequency display • Auto squelch • lockout • Memory back-up • Manual channel access • Programmable delay • Data skip key • Programmable search • Programmable service search • 5 priority channels . **\$189.99**



BC-895XLT "Trunk-Tracker" • 300 channels, 12 bands including Aircraft and 800 MHz, 10 banks • VFO control – covers 29-956MHz (cellular blocked) • 10 priority channels • TurboScan™ • One-touch weather with Weather Alert • Manual channel access • Built-in CTCSS • Trunk search • Scan lockout and delay • RS-232C port • Signal strength meter • Auxiliary tape output • Automatic store • 30 trunking channel indicator annunciators • 3-day memory backup • Programmable search • Lockout • 10 1/2" w x 3 3/4" h x 7 1/2" d, 3 1/2 lbs. **\$219.99**



BCT-7 Bear Tracker 800 (left) Pre-programmed with all frequencies for highway patrol, D.O.T, local and county police, news, fire, aircraft and CB services. Selectable by state (except HI) • 12 bands • 100 user programmable channels • Highway Patrol Priority Alert • Data Skip • Weather Scan • 13.8V DC or 110V AC operation • Mobile mount • 5" w x 7" d x 1 1/2" h, 1 lb, 11 oz. **\$179.99**

BCT-12 BearTracker Highway Information System (right) Covers low, high, UHF and 800MHz (cell blocked) highway patrol, police, sheriff, weather, news and transportation frequencies for 50 states and Canada • Weather emergency tone alert • Priority • Channel lockout • Digital signal meter level meter **Closeout \$159.99**



BC-350A 50 channel, 11 band mobile/base scanner with Aircraft and instant weather • Super Turbo-scan™ @ 100 channels per second • Full frequency LCD display • Private channels, 20 programmable and scannable • Police channels • 10 programmable fire and emergency channels • Marine channels • Band search • Lockout channels • Mounting bracket, AC adapter, telescoping antenna cigarette and DC power cords • 5 1/2" x 6 3/4" x 1 1/2", 1.6 lb **\$119.99**



BC-780XLT Continuous Band Programmable Scanning Radio AM/FM/WFM • 500 channels, 10 banks, 10 priority channels • Covers 25MHz-1.3GHz • Preprogrammed service searches • Full frequency, backlit, LCD display • TrunkTracker III • S.A.M.E. weather alert • SmartScanner™ • Clone feature • Alpha tagging • CTCSS/DCS • PC control • Base or mobile • Beep alert • Record **\$369.99**

ICOM

R-10-05 General Coverage Pocket Scanning Receiver 500kHz-1300MHz (cell blocked). AM, SSB, FM wide or FM narrow modes. Programmable tuning steps. On-screen spectrum display, 1000 non-volatile memory channels in 18 banks of 50 channels. Scan by bank, mode, or program. Alpha-numeric characters can be entered to identify channels and banks. Noise blanker and auto noise limiter. Auto frequency control (AFC) and more! Easy-to-read, edge-lit display • 24-hour clock with timer • Adjustable LCD contrast • Signal indicator • Power-saver function. Uses Ni-Cad, alkaline or other DC source. Ni-Cads and wall charger. 2.3" w x 5.1" h x 1.2" d **\$299.99**



R-2-06 Communications Receiver The world in your palm – 2 1/2" h x 3 3/4" w x 1 1/4" d. Wide frequency coverage from 0.495-1309.995MHz in 9 frequency bands with 400 memory channels (cell blocked). FM, WFM and AM modes. Features: Quick and easy band switching • Tone squelch (CTCSS decode) • Offset monitor capability • Built-in attenuator • Optional PC programming capability • Receiver-to-receiver data cloning option • Multiple scan functions • Backlit LCD w/timer • Priority watch function with beep alert • Channel indication • Automatic squelch • Up/down keys for AF level control • Low-battery indicator and beep • Auto-power-off function • MIL-SPEC 810 C/D/E; weather resistant • Includes Ni-Cad charger, two Ni-Cad cells, antenna, handstrap and belt clip. **Special \$179.99**



we have a

SECURE web site
at **www.aesham.com**



uniden



MARINE

MC-1010 80 channel Marine VHF Radio • All USA and International channels, 10 weather channels • Ultra compact rugged construction • Durable design microphone • Triple watch feature • Memory scan • Weather scan • 25 & 1W output • LCD display • External speaker jack • 12V DC @ 4.5A • 6 1/2" w x 4 3/4" d x 2 1/2" h, 1 lb. 12 oz. **\$129.99**



MC-1020 80 channel Marine VHF Radio • All USA and International channels, 10 weather channels • Ultra compact rugged construction • Quik Command™ microphone with touch channel 16 and 19 key • Triple watch Plus™ • Memory scan • Weather scan and alert • 25 and 1W output • LCD display and dimmer, back lit keypad • Public address • External speaker jack 12V DC @ 5A • 6 1/2" w x 4 3/4" d x 2 1/2" h, 1 lb. 12 oz. **\$139.99**



HH-940P Marine VHF Handheld All US, international and Canadian marine channels, plus 10 weather channels • Programmable memory • All channel scan • Instant channel 16 and 9 • Triple watch • Weather alert • Electronic touch controls • Super twist backlit LCD display • 1W • Keypad lockout • Battery charge indicator • Waterproof/submersible • Rechargeable NiCad battery, belt clip, wrist strap, drop-in charger • 2 1/2" w x 1 3/4" d x 4 3/8" h, 8.8 oz. **\$149.99**



HH-955 Marine VHF Handheld • All US, international and Canadian marine channels, plus 10 weather channels • Memory scan • Backlit LCD display • Triple watch • Instant Channel 16 and 9 • Weather alert • 5 and 1W • Keypad lockout • Battery charge indicator • Water-tight • Alkaline or rechargeable NiCad battery capability, requires 9 "AA" batteries (not supplied) • AC adapter, wrist strap and belt clip • 2 1/2" w x 1 3/4" d x 6 1/2" h, 19.5 oz. **\$99.99**



HH-985 Marine VHF Handheld All US, international and Canadian marine channels, plus 10 weather channels with S.A.M.E weather alert feature • All/selectable channel scan • Instant channel 16 and 9 • Triple watch • Electronic touch controls • Backlit invertible display and keypad • 5 and 1W • Keypad lockout • Battery charge indicator • Water-tight • Rechargeable NiCad battery, secure latch belt clip, wrist strap, drop-in battery capability (6 AA's not supplied) • 2 1/2" w x 1 1/2" x 5 1/4" h, 8.8 oz. **\$159.99**



MC-535 Marine VHF Radio (left) All USA and International, 10 weather/80 marine channels • Instant channel 16 • Memory scan • Dual watch • LED channel display • 25 and 1W output • Weather resistant • Front speaker, external speaker jack • 12 VDC @ 5A • 6 1/2" w x 7 7/8" d x 2 1/2" h, 2.4 lbs **\$99.99**

ICOM

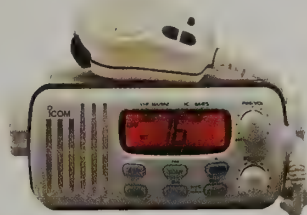


MARINE

M-710 SSB Marine Transceivers Rugged, 150W SSB Transceiver, 1136 channels with 160 user-programmable memories, PC programmable, alpha numeric readout on large LCD.

M-710 (21) General version without 2182kHz alarm, marine bands only **Special Order \$1399.99**

M-710-05 (22) Open version, covers 1.6 to 27.5 MHz, has 2182kHz alarm. **Special Order \$1599.99**



IC-M45AW VHF 25W Marine Transceiver Water-resistant gaskets are used throughout, including the mic. The durable, one piece aluminum diecast chassis provides dependability and good heat dispersal. Large backlit display shows all info at a glance • 'Tag' scan system – add or delete channels at the push of a switch • 'Smart' microphone – change channels or select output power without touching the front panel • Dual and tri-watch functions – monitor channel 16 while operating on another • All International and US channels are available, plus 10 weather channels w/weather alert function • Instant access to channel 16 and the call channel • Low battery indicator • 0.79" h x 2.36" w x 5.5" d... **\$179.99**

IC-M3A Mini Handheld Marine VHF Radio Programmable for U.S. and International channels plus 10 weather channels w/alert • Independent channel 16 • Full function and priority scanner • Dual/tri-watch - monitor channel 16 while operating another • 1/5W output • Large backlit display shows info. at a glance • Water resistant • Includes 6 NiCad batteries and wall charger 2 1/2" w x 5 1/2" h x 1 1/4" d, 14.4 oz. **\$159.99**



YAESU

AIRCRAFT



VXA-100-16/41B Aviator Pilot 5W TX power (PEP 1.5W typ.) • 3-way display titling • Internal sidetone • 300 memories • Auto Noise Limiter • One-touch emergency freq. access • 10 NOAA channels • Auto active weather channel scan • Priority dual watch • Back-lit keypad/display • One touch control knob • RX battery saver • PC programmable • MIL-STD 810 approved • VOR TO/FROM display • Course Deviation Indicator • Split channel operation • NiCad battery, headset adapter and belt clip included **\$499.99**

VXA-120 Aviator Pro II 4W • Direct freq. entry • 3-way display titling • Internal sidetone • 150 memories • 10 NOAA channels • Auto active weather channel scan • Auto Noise Limiter • Priority dual watch • Battery saver • PC programmable • MIL-STD 810 approved • NiCad batt., headset adapter, belt clip, antenna **\$299.99**

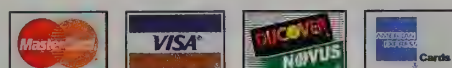


KENWOOD



MARINE

TKM-707 SSB Radiotelephone A high-performance unit designed to meet the stringent demands of marine operation. Utilizes a heavy duty rustproof aluminum chassis and the highest quality parts to maximize performance • 150W RF output power • 2 MHz-23MHz Marine operation with 500kHz-30MHz general coverage receiver • 198 memory channels • Multi-scanning • 2182kHz emergency alarm built-in • Optional tuner **Special Order \$1249.99**



We accept I.M.P.A.C.® Government Credit Cards

AIRCRAFT



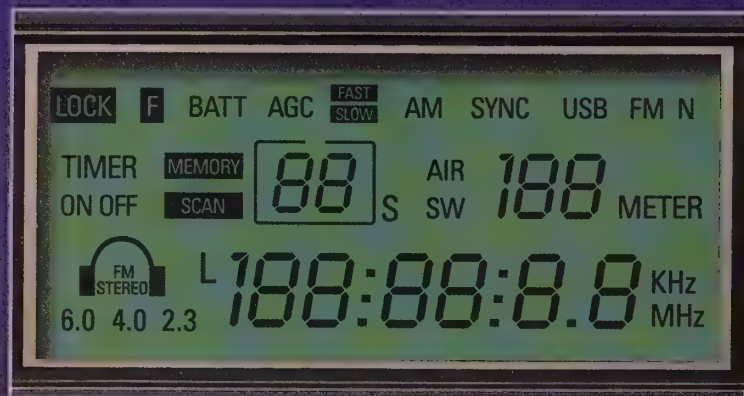
A-22 VHF Air Band Transceiver Covers (COM) 118-136.975, (NAV) 108-117.95 MHz and memory channels Programmed scan, memory scan and lock • 5W output • Instant 121.5MHz • NAV features: 200 channel VOR nav with CDI, radial heading TO/FROM VOR, auto bearing set • Semi-duplex, combines VOR/COM operation • Includes Ni-cad rechargeable battery and wall charger 2 1/2" w x 7 7/8" h x 1 1/2" d, 1.4 lbs **\$499.99**

Used & Demo
Equipment lists

Updated regularly on the web.
Check them out and order **On-line**

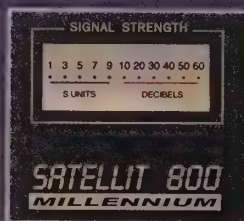


The Ultimate in Digital Technology



The LCD

Big! Bold! Brightly illuminated 6" by 3 1/2" Liquid Crystal Display shows all important data: Frequency, Meter base, Memory position, Time, LSB/USB, Synchronous Detector and more.



The Signal Strength Meter

Elegant in its traditional Analog design, like the gauges in the world's finest sports cars. Large. Well lit. Easy to read.

The Frequency Coverage

Longwave, AM and shortwave continuous 100-30,000 KHz.
FM: 87-108 MHz VHF Aircraft Band: 113-137 MHz.

The Tuning Controls

• For the traditionalist: a smooth, precise tuning knob, produces no audio muting during use. Ultra fine-tuning

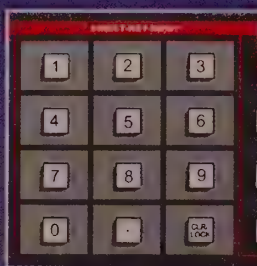


• 50Hz on LSB/USB, 100Hz in SW, AM and Aircraft Band and 20 KHz in FM.

• For Fixed-step Tuning:

Big, responsive Up/Down tuning buttons.

• For direct frequency entry: a responsive, intuitive numeric keypad.

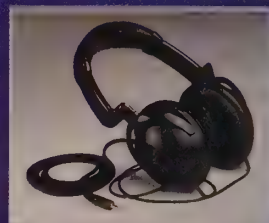


The Operational Controls

Knobs where you want them; Buttons where they make sense. The best combination of traditional and high-tech controls.

The Sound

Legendary Grundig Audio Fidelity with separate bass and treble controls, big sound from its powerful speaker



and FM-stereo with the included high quality headphones.

The Many Features

- 70 user-programmable memories.
- Two, 24 hour format clocks.
- Two ON/OFF sleep timers.
- Massive, built-in telescopic antenna.
- Connectors for external antennas - SW, AM, FM and VHF Aircraft Band.
- Line-out, headphone and external speaker jacks.

The Technology

Today's latest engineering:

- Dual conversion superheterodyne circuitry.
- PLL synthesized tuner.

The Power Supply

A 110V AC adapter is included for North America (a 220V AC adapter is available upon request). Also operates on 6 size D batteries. (not included)

Dimensions: 20.5" L x 9" H x 8" W

Weight: 14.50 lbs.



THESE ARE THE SATELLIT 800 MILLENNIUM'S MAJOR FEATURES. FOR A DETAILED SPECIFICATION SHEET, CONTACT GRUNDIG.

by **GRUNDIG**

Lextronix / Grundig, P.O. Box 2307, Menlo Park, CA 94026 • Tel: 650-361-1611 • Fax: 650-361-1724
Shortwave Hotlines: (US) 1-800-872-2228 (CN) 1-800-637-1648 • Web: www.grundigradio.com • Email: grundig@ix.netcom.com

GRUNDIG Best in Technology

Yacht Boy 400 Professional Edition (YB 400PE)

The most powerful compact Radio AM/FM Shortwave Receiver.

The Big Breakthrough! Power, performance, and design have reached new heights! The Grundig 400 Professional Edition with its sleek titanium look is packed with features like no other compact radio in the world.

Pinpoint Accuracy! The Grundig 400PE does it all: pulls in AM, FM, FM-Stereo, every shortwave band (even aviation and ship-to-shore)-all with lock-on digital precision.

Ultimate Features! Auto tuning! The Grundig 400PE has auto tuning on shortwave and stops at every signal and lets you listen. With the exceptional sensitivity of the 400PE, you can use the auto tune to catch even the weakest of signals.

Incredible timing features! The Grundig 400PE can send you to sleep listening to your favorite music.

You can set the alarm to wake up to music or the morning traffic report, then switch to BBC shortwave for the world news. The choice is yours!

Powerful Memory! Described as a smart radio with 40 memory positions, the Grundig 400PE remembers your favorites-even if you don't!

Never Before Value! Includes deluxe travel pouch, stereo earphones, owner's manual, external antenna and a 9 volt Grundig AC adapter. Uses 6 AA batteries (not included)

Style • Titanium look
Shortwave, AM and FM • Continuous shortwave from 1.6 - 30 MHz, covering all existing shortwave bands plus FM-stereo, AM and Longwave. • Single sideband (SSB) circuitry allows for reception of two-way communication such as amateur radio, military, commercial, air-to-ground, and ship-to-shore.

Memory Positions • 40 randomly programmable memory positions allow for quick access to favorite stations.

Multi-function Liquid Crystal Display • The LCD simultaneously displays the time, frequency, band, alarm and sleep timer.

Clock, Alarm and Timer • Two alarm modes: Beeper and radio. • Dual clocks show time in 24 hour format. • Sleep timer programmable in 15 minute increments.

Dimensions: 7.75" L X 4.5" H X 1.5" W

Weight: 1 lb. 5 oz.

"The Best compact shortwave portable we have tested"

Lawrence Magne.-Editor in Chief, Passport to World Band Radio.



Power and Performance with the Affordable Yacht Boy 300 Professional.

Designed for the traveller, the titanium look digital radio provides incredible power and performance for an incredibly low price! Packed with features, this radio is an excellent value, accompanied with 3 AA batteries, AC adapter, earphones, supplementary Antenna and carrying case!

State-of-the-art features include:

- Digital tuning with 24 user-programmable memory presets
- 13 SW Bands (2.30-7.80 MHz; 9.10-26.10 MHz)
- Illuminated multifunction LCD display screen
- AM/FM stereo via earphones
- Clock, alarm and 10 to 90 minute sleep timer
- Digital tuning display
- Direct frequency entry
- DX/ local selector
- Titanium look finish
- External antenna jack
- Dynamic micro speaker
- Earphone jack
- Telescopic antenna

Dimensions: 5.75" L X 3.5" H X 1.25" W

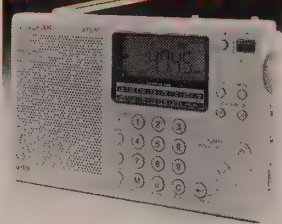
Weight: 9.92 oz



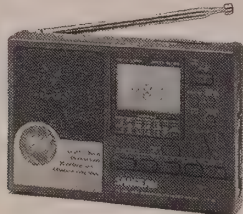
by **GRUNDIG**

Lextronix / Grundig, P.O. Box 2307, Menlo Park, CA 94026 • Tel: 650-361-1611 • Fax: 650-361-1724
Shortwave Hotlines: (US) 1-800-872-2228 (CN) 1-800-637-1648 • Web: www.grundigradio.com • Email: grundig@ix.netcom.com

SANGEAN



ATS-505 Professional Digital Multi-band Receiver • AM/FM stereo/shortwave and SSB reception • Continuous coverage – tunes all shortwave bands and any frequency in-between • Auto memory scan – scans 45 presets, playing each in sequence • Auto preset system – determines all memory presets based on signal strength of station • Fine tuning • 9/10kHz switch • Lockswitch • Tone control • Local/DX switch • Dual time clock – 12/24 hour display, adjustable sleep timer and Human Wake System with repeating beep tone (volume increases every 15 sec.). Includes carrying case and earphones..... **\$129.99**



ATS-303 PLL synthesized. 13 bands, covers 2.3 to 7.3 and 9.5 to 26.10MHz. AM, FM, FM stereo with headphones. Selectable continuous tuning across frequency range and/or shortwave band. Time and frequency display, auto or manual station search, 20 station memories. Large LCD display, tuning LED. Clock with radio or buzzer alarm and adjustable sleep timer. MW 9K/10K switch for overseas. Low battery icon. Requires 4 "AA" batteries or external. 6V DC. 6½" w x 4½" h x 1½" d, 15 oz **Closeout \$69.99**

DT-200V Broadcast and TV Band Receiver (left) Fits in shirt pocket or clips to belt. Covers AM and FM broadcast bands (FM stereo via headphone), plus the audio portion of TV channels 2 to 13. LCD display, up and down tuning buttons, auto-scan, 19 memories, automatic shut-off, built-in speaker. Belt clip and stereo earphones included. Uses two "AA" batteries. 4½" h x 2½" w x ¾" d, 5 oz..... **\$69.99**



ATS-909 FM-Stereo/MW/LW/SW PLL Synthesized Receiver Five tuning methods: Direct frequency, Autoscan, Manual, Memory recall and Rotary, 307 memories. Stereo via earphones, SSB reception. MW 9k/10k switch. AM wide/narrow filter and FM mono/stereo selector. Dual time with three timers and sleep timer. Clock feature displays 42 city times. RF gain/tone controls. Lock switch, recorder output jacks, battery and signal strength indicator. Uses four "AA" batteries or 6V DC; AC adapter incl. 8½" w x 5½" h x 1½" d, 1.9 lbs..... **\$269.99**



ATS-818CS (left) World Band Receiver with Programmable Cassette Recorder 16 bands, continuous coverage 50kHz to 30MHz. AM/SSB/CW/FM modes; stereo via headphones, 45 memory presets. Tuning methods: Direct input, auto or manual scan, memory recall, rotary dial. AM wide or narrow filter, tone and RF gain controls, signal strength and battery indicator. Programmable cassette recorder, play and record LED indicator, auto-stop feature. Clock with dual time display, alarm and sleep timer. Uses seven "AA" batteries (not included). Includes AC adapter and external antenna adapter. 11½" w x 7¾" h x 2¾" d, 5 lbs **\$229.99**

ATS-818 (right) World Band Receiver All features of the ATS-818CS, w/out cassette recorder **\$179.99**



ATS-404 Full Performance, Full Featured Digital, AM/FM Stereo Shortwave Receiver CONTINUOUS COVERAGE – tunes continuously all shortwave bands and any frequency in between. AM reception with 9k/10k switch, FM plus FM stereo with earphones. Keypad entry and auto and manual search buttons, 45 memory presets, auto memory scan. Illuminated LCD display, tone control, lockswitch. Dual time (12/24 hour) clock and adjustable sleep timer with new Human Wake System. Carrying case and stereo earbuds included. Uses four "AA" batteries 6½" w x 4" h x 1½" d..... **Special \$89.99**



ATS-606A Compact Digital All Band World Receiver Continuous ALL BAND coverage 153kHz to 30MHz. AM/FM (FM stereo with earphones). 54 memories, manual or keypad tuning, 1kHz/step fine tuning, scanning, LCD display. Dual time clock and sleep timer. 5¾" w x 3½" h x 1½" d **\$149.99**

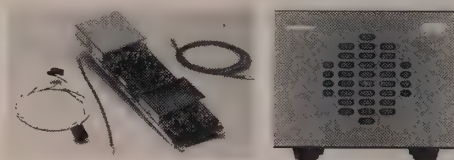


SR-77 Miniature AM and FM Stereo portable Receiver Deep Bass Boost feature. Uses single "AAA" battery. Only 3" w x 1½" h x ¾" d. No speaker, comes with stereo earphones **Closeout \$19.99**

DRAKE



R-8B Communications Receiver Covers 10kHz-30MHz (35-55MHz, 108-174MHz with optional VHF converter) • Dual VFOs • 1000 memories • Multi-function scanning • AM/FM/RTTY/CW/LSB/USB modes • 5 voice bandwidth filters • Built-in receive preamp/attenuator & noise blanker • S-meter • Passband offset • Selectable AGC • Built-in speaker • Multiple antenna inputs • Sequential tuning • 3 selectable tuning step sizes • Keypad entry of mode & bandwidth • Selectable sideband • Synchronous AM detector • RS-232 computer control • Optional interface software for MS-DOS • Speaker/recorder connections • Multi-voltage power supply • 13½" w x 5½" h x 13" d, 13 lbs **\$1199.99**



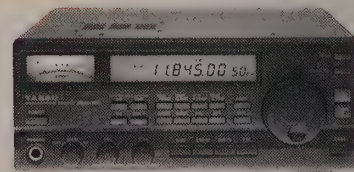
1590 VHF Converter (left) 35-55MHz and 108-174MHz..... **\$219.99**

MS-8 External Speaker (right) for R-8B **\$49.99**



SW-8 Communications Receiver Covers 100kHz-30MHz, 87-108MHz (FM stereo w/headphones) and 116-136MHz aircraft • 70 scannable memories • Standard and synchronous detection AM • Selectable SSB reception on the medium and shortwave bands • Direct frequency entry keypad • 0.5uV sensitivity • Dual 6 or 4kHz AM selectivity • 2.3kHz SSB selectivity • High contrast LCD readout • 100Hz tuning accuracy • Dual-mode clock and timer • AC adapter supplied (optional batteries for portable operation) • 11" w x 5½" h x 11¾" d, 10 lbs.. **\$799.99**

YAESU



FRG-100B High Performance Communications Receiver Covers 50kHz-30MHz – CW, SSB, AM modes; FM optional. 50 tunable memory channels and two band edge memories. Multi-function scanning. Adjustable SSB carrier offset, selectable AGC rate, noise blanker, all mode squelch, RF attenuator, twin 12 and 24 hour programmable clocks with on/off timer and sleep-timer, CAT system for PC control. Bright backlit LCD readout with adjustable control. 120/240 VAC or 12-14VDC @ 1.2A 9¾" w x 3¾" h x 9¾" d, 6.6 lbs (See Price Guide for optional filters and high-stability oscillator)..... **Special \$569.99**

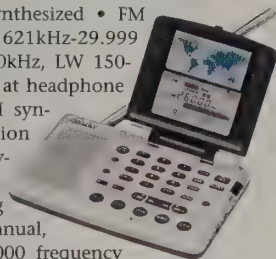
SONY



WORLD BAND RADIOS

ICF-2010 PLL synthesized • Range: 150kHz-30 MHz, 76-108MHz FM and 116-136MHz air band • 32-station memory • Manual, auto and memory scan tuning • SSB/CW and AM synchronous detection • Switchable IF bandwidth • Programmable timer • Built-in clock with alarm, standby and sleep timer • Requires 4.5V DC or three "D" cells • Includes 120V adapter, earphone, SW external antenna, connector and handbook • 11.3" w x 6.3" h x 2.1" d, 3.75 lbs **\$359.99**

ICF-SW07 PLL synthesized • FM 76-108MHz, SW 1621kHz-29.999 MHz, MW 530-1620kHz, LW 150-529kHz • FM stereo at headphone jack • SSB/CW, AM synchronous detection • SW station call, memory tuning plus four other tuning methods: direct manual, scan or preset • 3000 frequency memories • One-push access to 8 major stations (BBC/VOA/DW, etc.) • Station labels with label editing • 24-city name/time display • Built-in timer • Clock with sleep timer and alarm • Requires 3 VDC or 2 "AA" batteries • 5.3" w x 1.2" d x 3.6" d, 9.1oz • Includes external active antenna module, AC adapter, stereo earphones, leather case..... **\$399.99**



ICF-SW11 Compact • 12 bands including FM stereo, MW, LW and SW bands 1-9 • Easy analog tuning with LED indicator • FM stereo headphone jack for private listening in noisy environments • DC in-jack for optional AC adapter • 6.5" w x 3.75" h x 1.3" d..... **\$49.99**

ICF-SW12 11 bands, including FM, AM and SW bands 1-9 • Designed for travel - compact size with protective lid • World time clock and universal time coordinator to calculate time in cities worldwide • Backlit LCD display • LED tuning Indicator for precise center-frequency indication and accurate tuning • Built-in alarm w/convenient snooze button • Requires 2 "AA" cells • 4.3" w x 3.1" h x 1.2" d. **\$99.99**



we have a

SECURE web site
at **www.aesham.com**



ICF-SW30 • 12-Band receiver including FM stereo, AM and SW Bands 1-10 • 1 kHz Step Tuning to lock in on precise station reception • Dual Conversion Tuner Circuitry for high sensitivity • 15 Station Memory Presets • Digital Synthesized Tuning to simplify tuning in the desired station • Auto Scan Tuning • Built-in clock with alarm • News/Music tone switch • 6.75" w x 4.3" h x 1.4" d **Closeout \$79.99**



ICF-SW35 PLL synthesized, dual Conversion super hetrodyne • Range: AM (530-1710 kHz), FM (76-108 MHz) • FM stereo at headphone jack • Shortwave from 2250kHz-26.1MHz • UP/DOWN tuning buttons 1kHz/5kHz tuning steps in shortwave • 50 memory presets (5 banks of 10 presets each) • 1 or 5 kHz step tuning on SW • Memory scan • Built-in digital clock with two wake times and 60-minute sleep timer • Dial illumination button, lock switch, attenuator • 2.5" speaker plus earphone jack • Includes cloth protector and SW guide • Requires 3V DC or two "AA" cells • 6.7" w x 4.5" h x 1.4" d, 16 oz **\$89.99**

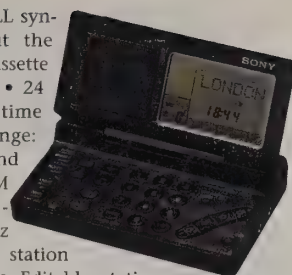


ICF-SW40 PLL synthesized • Analog/digital tuning • 14 bands • Range: LW/AM/SW (3850kHz-26.1MHz) and 76-108MHz FM (FM stereo-to-headphone jack) • 20 station memory presets • 1kHz step tuning • Built-in clock with dual standby function • 6.75" w x 4.25" h x 1.6" d, 15 oz **\$129.99**



ICF-SW77 PLL synthesized • Electronic rotary tuning • Preset, 10-key direct, manual and scan tuning • Range: 150kHz-30MHz and 76-108MHz (FM stereo-to-headphone jack) • 50Hz tuning steps • Clock display • 5-event programmable timer • Sleep timer • 162 memory presets with station name tuning • SSB/CW and AM synchronous detection • Backlit LCD display • World time scale • Large, 5"x 3" speaker • Requires 4 "C" cells • Includes 120V adapter, earphones, belt and wind-up antenna • 10.8" w x 6.8" h x 1.8" d, 3.3 lbs **\$469.99**

ICF-SW100S PLL synthesized • About the size of an audio cassette - ideal for travel • 24 city name and time display • Range: 150kHz-30MHz and 76-108MHz FM (stereo-to-headphone jack) • 1kHz step tuning • 50 station memory presets • Editable station labels • Auto scan, manual and 10-key direct access tuning • Built-in clock with sleep timer and dual standby • Includes stereo headphones, 120 VAC adapter, active antenna and soft carrying case • Requires 3V DC or two "AA" cells • 4.3" w x 0.9" h x 2.8" d, 8 oz **\$349.99**



ICF-SW1000T PLL synthesized • 1 kHz step tuning • Range: 130kHz-30 MHz and 76-108MHz FM (stereo to headphone jack) • Built-in stereo cassette recorder with auto-reverse and timer record • SSB and synchronous AM detection • 32 memory presets • Built-in clock with alarm, dual standby and sleep timer • Requires 3VDC or 3 "AA" cells • Includes vinyl case, stereo earphones, hand strap and wind-up antenna • 7" w x 4.25" w x 1.6" d, 1 lb... **\$469.99**



ICF-SW7600G PLL synthesized • Manual and auto scan 1kHz step tuning • 10-key direct access tuning • Range: 150kHz-30MHz and 76-108MHz FM (stereo-to-headphone jack) • 22 station memory presets • Dual conversion superhet • SSB/CW and AM synchronous detection • Multi-function LCD digital readout • Dial light and LED tune indicator • Built-in clock with sleep timer and dual standby functions • Record output jack • 9/10kHz MW tuning switch • External antenna jack • Large 3" speaker • Requires 6V DC or four "AA" cells • Includes vinyl case, wind-up antenna and shortwave handbook • 7.6" w x 4.75" h x 1.3" d. 3 lbs **\$179.99**



AN-LP1 Active Antenna Enhances sensitivity for clearer reception of even weak signals. • Light weight • Provides high sensitivity and noise reduction • Active antenna controller with rotary tuning • 19" loop that folds to 7" for portability • Easy to mount • Includes soft carrying case **\$89.99**





AR-16B Wide Band Handheld Scanning Receiver 500KHz to 1300 MHz (cellular blocked) • Modes: AM, FM-w, FM-n • 500 memory channels, 5 banks • 25 scan search banks • Scans 20 channels per second • Preset 21 frequency band settings • Automatic squelch • S-meter • Monitor function for weak signals • Back-lit keypad and display • Includes antenna, two alkaline batteries, hand-strap, manual • 2.4" w x 4.2" h x 1.2" d, 5.4 oz..... **Closeout \$199.99**

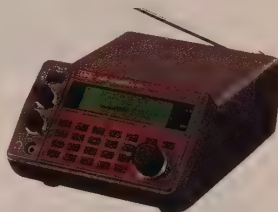


AR-8200B All-Mode Wide-Band Modular HT Receiver • 500KHz to 2040MHz (cell blocked) • 1000 memory channels • Alphanumeric display • FM-w, FM-n, super narrow AM, AM-w, AM-n, USB, LSB, CW • Program-mable tuning steps • Spectrum display scope function • Computer control with downloadable software • Optional cards for memory expansion • Noise limiter • Attenuator • CTCSS squelch/search, tone eliminator • Records or plays 20 sec. of audio • Battery saver • Uses 4 AA NiCad batteries (supplied), alkalines or external 12V • 2.4" w x 5.7" h x 1.0" d, 0.75 lbs..... **Closeout \$499.99**



AR-8200MKIIB Same as above model with the addition of • New temperature compensated crystal oscillator for greater frequency stability • Brighter backlit display • Telescopic antenna • 1100mAh high capacity NiCad batteries **\$549.99**

AR-5000B High Performance Wide-Band Receiver 10KHz to 2036MHz (cell blocked) • 1000 memory channels and 20 search banks with EEPROM storage • Multiple IF bandwidths • Scans 45 channels per second • AM, FM, LSB, USB, CW modes • Triple conversion IF stage • RS-232C port • 20 search banks • Manual tuning dial • N-type and SO-239 antenna connectors • 12VDC @ 1A, adapter included • 8" w x 4.1" h x 10" d, 4 lbs..... **Special Order \$1899.99**

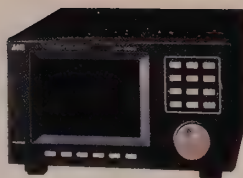


AR-7000B Advanced Technology Wide Range Receiver 100KHz to 2GHz (cell blocked) • Triple conversion + DSP IF stage • Color LCD video display • Selectable NTSC or PAL video output • 1500 channels • FM-w, FM-n, AM, USB, LSB, CW • 2 VFOs • Alpha-numeric channel labels • AM, FM, LSB, USB, CW • Computer programmable • RS-232C and DIN ports • Spectrum display • Adjustable squelch tail delay • 8 programmable search banks • 8 programmable scan banks • Manual tuning dial • Scans 20 channels per second • BNC antenna connector • 12VDC @ 1A, adapter included • 3.5" h x 8.6" w x 9.5" d, 7.7 lbs..... **Milwaukee Only \$1169.99**

SDU-5500

Spectrum Display

Unit Visually identify signals and relative strength • Works with A R - 5 0 0 0 B / A R - 3000AB, ICOM base and other receivers with a 10.7MHz IF output • 10 MHz bandwidth - 10 kHz to 2600 MHz • 5 kHz/30Hz resolution • White and blue mono LCD monitor.. **\$1099.99**



MFJ ENTERPRISES, INC.



8100W Regenerative A 10 ft. wire brings stations world-wide loud and clear. Tune international short-wave, Hams on SSB/CW, RTTY and packet. Covers 75-13M SW bands. Vernier drive tuning. Uses 9-volt battery, walkman-type earphones or plug-in speakers. Size: 7" w x 2 1/2" h x 6" d, 1 lb wired **\$89.99**



784B Super DSP Filter Eliminates those hetrodynes; reduces noise and interference on SSB/CW/AM, digital modes, VHF, EME, satellite. Tunable FIR filters minimize ring, prevent data errors. Up to 60dB attenuation. Tunable Spotting Tone™ auto tunes CW filter in narrowest bandwidth. 2W audio amp with AGC. 12V DC or 110VAC with MFJ-1315. Size: 2 1/2" h x 9" w x 6" d..... **\$229.99**



752C SSB/CW Audio Filter Pull out stations from noise and interference. Peak, notch, low or high pass control helps eliminate hetrodynes and interference. Filters tune 300 to 3000Hz; bandwidth varies from 40Hz to almost flat; notches to 70dB. Switchable inputs for two radios. Uses 9 to 18VDC or 110VAC with MFJ-1312B. Size: 10" w x 2" h x 6" d..... **\$89.99**



956 LW/MW/SW Pre-selector/Tuner Improves reception of signals from 150kHz to 30MHz. Boosts signals while rejecting images, intermodulation, other phantom signals. 2" h x 3" w x 4" d **\$49.99**

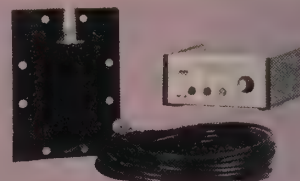


959B Antenna Tuner and Pre-amp For 1.6-30MHz, provides an impedance match between antenna and receiver for best reception. 20dB gain pre-amp and 20dB attenuator. Two antenna inputs for two receivers. 9-8V DC or 110V AC with MFJ-1312 adapter. Size: 5" w x 2" h x 6" d **\$99.99**

AR-3000AB

All-Mode High Performance Professional Monitor

100KHz-2036MHz (cell blocked) • 400 memory channels • FM-w, FM-n, AM, USB, LSB, CW • Triple conversion IF stage • Scans 50 channels per second rate • RS-232C port for computer control • 4 search banks • Manual tuning dial • BNC antenna connector • Scans 20 channels per second • 5.4" w x 3.1" h x 7.9" d, 2.4 oz..... **\$1099.99**



1024 Outdoor Active Antenna For 50kHz to 30 MHz reception. Separate RF amp module with 54" whip mounts outside, interconnect made by supplied 50' ft. coax to control unit, containing gain control and 20dB attenuator. Switches select between two receivers and auxiliary antenna. LED "on" indicator. Auxiliary in/output jacks. 12VDC or 110VAC with MFJ-1312. Control unit: 6" w x 2" h x 5" d, Outside module: 3" h x 4" w x 4" d **\$129.99**



1020B Indoor Active Antenna Covers 300 kHz-30MHz; five bands. Telescoping (21") antenna provides good signal strength. Functions as a pre-selector when using an external antenna - minimizes intermod, improves selectivity, reduces noise. Uses 9V battery, 9-18V DC or 110V with MFJ-1312B. Size: 5" w x 2" h x 6" d **\$79.99**



462B Multi-Reader Easily decodes CW, RTTY, ASCII, AMTOR signals from amateur, commercial, military, weather, aero and marine. Displays decoded messages on a 16-character LCD display. Simply plugs into receiver phone jack. Requires 12V DC. Size: 5 1/2" w x 2 1/2" h x 5 1/2" d **\$169.99**



8121 World Band Receiver Receives FM, medium wave, long wave and 18 shortwave bands. Sony integrated circuit design provides excellent sensitivity and selectivity. Built-in telescopic antenna. LED tuning indicator. World time zone and frequency charts on back panel. Built-in 3" speaker. Size: 4 1/2" h x 7" w x 1 1/2" d Works on 6V DC or (4) AA batteries **\$39.99**



ICOM



PCR-1000 Communications Receiver Computer
Turn a PC into a world-wide communications receiver. Connect the PCR1000 to a lap/desktop IBM-compatible for reception of a wide range of frequencies. Listen to favorite stations in the background while running other applications. 100% PC hardware external, IBM PC compatible. Everything needed to connect to your computer included: power supply, built-in speaker, antenna, RS-232 cable and software • Frequency Coverage: 0.01000-823.999999MHz, 849.000001-868.999999MHz, and 894.000001-1300.00MHz (Cell blocked and specifications guaranteed 0.5-1300MHz, only) • WFM, FM, AM, SSB, CW • 1000 mem. channels per file • Requires IBM® compatible; Windows®3.1 or 95; Intel 486DX4 or better; 10MB HD free space; 16MB RAM; FD drive, RS-232C (38400 bps or faster) serial interface; 640 x 480 display or greater. **Special \$349.99**



We accept I.M.P.A.C.® Government Credit Cards

PCR-100-12 Communications Receiver Computer Wide frequency coverage: 0.01-1300MHz (cell blocked). Listen to marine, shortwave, CB, amateur radio, FM, TV audio, commercial radio, satellites, aviation, etc. • Easy to use with 2 selectable control panels • AM, FM, WFM modes • CTCSS decode • Tunable bandpass filter • 13 tuning steps • Band scope • 20 banks of 50 memories each • Stereo audio output • Auto noise limiter • RF attenuator • Digital S-meter • S-meter squelch • Includes wire antenna, OPC-743 serial cable, AC adapter and receiver software • Requires Windows 95/98, 486DX4 or better, 10MB free HD space, 16MB memory, serial interface (38400bps), 640 x 480 resolution.. **Special \$199.99**



R-3 Communications Receiver
Provides wide-band receive capability from 0.5-2450MHz (cell blocked). Includes a 2-inch TFT color display which may be switched to a mono LCD to conserve battery power. Receive your favorite TV show, scan for wireless cameras like those found in race cars. Use in conjunction with a wireless camera to monitor babies, traffic, etc. Video/audio output terminal allows displaying to a large monitor or recording device. Signal strength and band scope functions assist in finding the action you want to hear. Includes 450 memory channels with alphanumeric names, CTCSS, attenuator, and more. A long lasting Li-ion battery offers easy charging, lightweight performance, and up to 27 hours of continual use on the mono LCD.

This device has not been approved by the Federal Communications Commission. This device may not be sold or leased, or be offered for sale or lease, until approval of the FCC has been obtained.



R-75 HF + 50MHz Receiver Covers a wide frequency range from 0.03-60MHz and includes 101 memory channels. All mode- USB, LSB, CW, RTTY, AM, S-AM and FM. Alphanumeric readout with digital bar S-meter. Conventional tuning plus numeric key pad for direct input. Features include high stability receiver circuit, superior dynamic range, 2-level preamp, noise blanker, synchronous AM detection, twin PBT capability, front mounted speaker, filter options and optional UT-106 DSP unit. Operates from 13.8V DC @1.1A, or supplied AC adapter. 9 1/2" w x 3 1/4" h x 9 1/2" d, 6.6 lbs **\$699.99**



R-8500 Wide Band All Mode Receiver Covers 0.1-2000MHz (cell blocked) with 10Hz resolution. All modes: AM, FM, WFM, SSB, CW and optional TV-R7100 TV/FM adapter. Dual VFOs and direct keyboard entry. Versatile scan functions; 1000 tunable multi-function memories; 20 banks of 40 channels plus auto-write and skip areas of 100 channels each. 20 scan edge memory channels store 10 sets of freq. for programmed scan, plus priority. RIT, selectable AGC, noise blanker, tone, squelch, record jack. Selectivity: 500Hz, 2.3, 6 and 15kHz. RS-232C interface. Voice synthesized readout. 110/220V AC. 11 1/2" w x 4 3/4" h x 10 1/2" d, 16 1/2 lbs.... **Special \$1499.99**

ALINCO 2001 - AMATEUR RADIO AND MORE!

For innovative new products, come to Alinco!

DM-330MVT Communications Grade Switching Power Supply

NEW!

Tiny, powerful, 30A continuous, 32A peak output, weighs less than 5 lbs! Variable output 5 ~ 15 VDC, memory output, rear panel high-current (30A) terminals, triple circuit protection, illuminated V/A meter, ultra-quiet with patent-pending noise-shift circuit. Front panel cigar (10A) and quick-connect (5A) terminals, ripple less than 15mV p-p. Perfect for travel, station or test bench use. There's no switching supply like it!



DM-340MVT IC Regulated Power Supply

30A nominal, 35A peak output. Variable output 0 ~ 15 VDC, convenient front-panel connections includes high-current terminals, cigar lighter (10A) and quick-connect (5A). Built-in circuit protection, convenient front-panel fuse. (220VAC version available.)



Simple • Clean • Dependable

ALINCO

AMATEUR RADIO'S VALUE LEADER™

U.S.A. Alinco Branch: 438 Amapola Ave. • Suite 130 • Torrance, CA 90501
Phone: (310) 618-8616 • Fax: (310) 618-8758 • Internet: <http://www.alinco.com>

NEW! DJ-X2T Scanning Receiver

"Credit Card" size, 0.5 MHz ~ 1 GHz tuning range*, 700 memory channels (70 channels X 10 banks), AM, FM, WFM modes, SMA antenna connector, 3 different antenna modes including internal AM ferrite bar, illuminated display, effective RF "sniffer" feature detects hidden transmitters (patent pending), internal Lithium-ion battery PLUS snap-on-dry-cell power pack and more! (DJ-X2K export version available.)

DJ-X10T Multimode Wide Range Receiver

100 KHz ~ 2 GHz*, 1200 memories, alpha numeric display, Channel Scope™ receives WFM, NFM, USB, LSB, AM and CW. Internal HELP function, much more! (DJ X10K export version available.)



DJ-S46T UHF Family Radio Service Transceiver

No license required! 14 channels, FM clarity, Ni-Cd battery and charger, also operates on AA cells. Optional speaker mics and external power adapter available too! Shares accessories with DJ-S11T and DJ-S41T.



ANTENNA TUNERS

EDX-1 (not pictured) Manual Antenna Tuner.

Works with any HF radio up to 150 w output, illuminated Power/SWR meter, accepts PL-259 connector.

EDX-2 Automatic Wire Antenna Tuner

Tunes random length wires or grounded mobile whip from 9 to 80 feet. Compatible with DX-70 and DX-77 HF radios. Made for outdoor mounting, use at home, mobile or marine. Outputs to antenna wire only (no coax output).



Specifications subject to change without notice or obligation. *Cellular excluded.



SINGLE BAND HANDHELDS

The AT-201HP and AT-401HP are ADI's advanced single band handhelds. They have 40 memory channels, programmable band scan, automatic repeater offset, frequency or channel display and more. The units have a rugged metal chassis and nicely backlit keypad and display. They come standard with a 12 volt battery, which provides 5 watts of RF power, perfect for accessing those distant repeaters. Other common features include • MARS and CAP capable (permits required) • 5W output (with 12 VDC) • 40 memory channels to store any offset or tone • CTCSS encode/decode • Programmable band and memory scan modes • DTMF paging • Dual frequency watch • Auto-repeater offset • User selectable frequency or channel display modes.

AT-201HP Two Meter Handheld Transmit range: 144-148MHz • Receive range: 130-179MHz • 4 1/4" h x 2" w x 1.3" d excludes battery pack..... **\$134.99**

AT-401HP 70 Centimeter Handheld Transmit: 430-450MHz • Receive: 420-470MHz • 4 1/4" h x 2" w x 1.3" d excludes battery pack..... **\$199.99**

Available Accessories

ARC12 Smart charger, CC1802 Mobile battery charger, CHA072 Wall charger for RBP072, CHA120 Wall charger for RBP120/RBP22, CPB262 6 AA NiCad battery holder for CBP262, MQA99 Rapid charger, PCA145 Cigarette lighter cable, RBP072 7.2V 700mA NiCad, RBP120 12V 600mA NiCad, RBP120NMH 13.2V 1kHz NiMH, SLC200 2.5W carrying case, SLC200L 5W carrying case, PRESPM100 Speaker mic, PRESPM200 Lapel mic/earphone, PRESPM200E Lapel mic with ear hook, PRESPM400 Boom mic, PRESPM400PT Boom mic with PTT, PRESPM500 Throat mic and earphone, PRESPM600 Speaker mic, PRESPM700 Palm mic/earphone

The PR-52 and PR-222 handhelds expand your horizons beyond "average" VHF operation, and onto the enjoyable 222MHz amateur band or the 6m "DX" band. These 5-watt, palm-sized units bring you the portability and power you need to fully explore two great VHF bands. Other common features include 5W output with included NiCad battery pack • MARS and CAP capable • Built-in CTCSS encode and decode • 40 memory channels store any tone or offset • Direct frequency entry using 16 button keypad • Frequency or channel display modes • PC programming capability or cable cloneable.

PR-52 6 Meter Handheld Transceiver Transmit: 50-54 MHz • Receive: 40-54MHz • 4 1/4" h x 2" w x 3/4" d excluding battery pack **\$169.99**

PR-222 220MHz FM Handheld Transceiver Transmit: 222-225MHz • Receive: 216-228MHz • 4 1/4" h x 2" w x 3/4" d excludes battery pack . **\$189.99**

Available Accessories

CC1802 Mobile battery charger, CPB263 AA battery case for CBP263, MQA99 Rapid charger, PTC001 Mobile power pack, RBP22 12V 600mA NiCad, RBP22H 12V 1000mA NiMH, SLC22L Leather case, PRESPM100 Speaker mic, PRESPM200 Lapel mic/earphone, PRESPM200E Lapel mic with ear hook, PRESPM400 Boom mic, PRESPM400LPT Boom/lapel mic with PTT, PRESPM400PT Boom mic with PTT, PRESPM500 Throat mic and earphone, PRESPM600 Speaker mic, PRESPM700 Palm mic with earphone

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FREE ITEMS included with some radios.

See Price Guide for details.

DUAL BAND HANDHELD

AT-600HP Dualband 2M/70CM Handheld The AT-600 is a full powered (5-watt) handheld that allows you to monitor both 2 meters and 70 centimeters at the same time! The radio is fully alphanumeric, and also features one of the cleanest wideband receivers available today. Receive police, fire, medical calls, and more without programming. All NOAA weather channels are already preprogrammed. Fully PC programmable using the optional PROG-600 PC programming kit. Clones to any other AT-600. Features:

Transmit range: 144-148, 430-450MHz • Receive range: 108-174 (including AM airband), 400-470, plus 900-985MHz (cellular blocked) • MARS and CAP capable (permits are required) • Simultaneous VHF/UHF receive • Single band, or full duplex operation • Crossband repeat • Separate volume and squelch controls for each band • 9 six-character alphanumeric display • 200 memories store any offset or tone • CTCSS encode and decode included • 10 DTMF autodialer memories for autopatch use • DTMF paging included • Auto power off and battery save • PC programmable (with optional programming software) • On-the-air and wired cloning • Large backlit keypad and display • Battery voltage meter function • 4 1/4" h x 2" w x 1 1/2" d excluding battery pack..... **\$299.99**

Available Accessories

ARC12 Smart charger, CHA612 Wall charger for RBP612, CHA672 Wall charger for RBP607, CPB262 6 AA or NiCad battery holder, MQA999 Rapid charger, PCA600 Cigarette lighter cable, PROG600 PC programming software and cable, RBP607 7.2V 700mA NiCad, RBP612 12V 600mA NiCad, RBP612NMH 13.2V 1kHz NiMH, SLC600L 5W carrying case, SLC600S 2.5W carrying case, PRESPM100 Speaker mic, PRESPM200 Lapel mic/earphone, PRESPM200E Lapel mic with ear hook, PRESPM400 Boom mic, PRESPM400PT Boom mic with PTT, PRESPM500 Throat mic and earphone, PRESPM600 Speaker mic, PRESPM700 Palm mic with earphone



SINGLE BAND HANDHELD

AH-50 6M FM Transceiver 50-54MHz coverage • Backlit LCD with function indicators • Full 5W output power • Selectable 1W mode • CTCSS tone frequency • 5 programmable memories • Full normal and reverse re-peater functions • Power saver with low battery indication • 6" h x 2 1/2" w x 1 1/4" d • Includes: flexible antenna, NiCad battery pack, power adapter, battery charger, belt clip, wrist strap.. **C/O \$99.99**

Available Accessories

BC09 6AA cell battery holder, BC12 8AA battery holder, CC27 Leatherette case, DA27 12V adapter, DW12 Wall charger, EX01 Speaker mic, MA27 Cigarette lighter/antenna adapter, NP126 12V NiCad battery



SINGLE BAND HANDHELDS

DJ-S11T Sub-Miniature VHF HT TX/RX: 144-148MHz • 340 mW output • 20 multi-function memories plus 1 call • Encoder installed (50 tones) • Illuminated display • Use 3 AA or NiCad battery • Pivoting antenna • 4" h x 2" w x 1" d, 6 1/2 oz..... **\$79.99**

DJ-S41T Sub-Miniature UHF HT Same features and specifications as the DJ-S11T but covers 425-449.995MHz..... **\$79.99**

Available Accessories

EBC6 Mobile HT bracket, EDC78 Wall charger (not alkaline), EDH18 12V/5.5V DC cigarette lighter plug, EME12 Headset/earphone/microphone with VOX, EME13 Headset/ear bud/microphone with VOX, EME15 Earphone/microphone with VOX, EME16 Tie-pin microphone with earphone, EME17 Boom earphone microphone, EME6 Earphone, EMS47 Speaker microphone with volume control, EMS51 Speaker microphone, ESC27 Soft case

DJ-195T 2M HT 5W output • 135-174MHz rx • 40 multi-function memory channels with alphanumerics • MAR/CAP capability • Alphanumeric display • CTCSS tone enc/dec and DCS • S-meter • Auto dialer • Cable cloning • PC programming capability • Theft alarm • Experimental insect repel • 5" h x 2.2" w x 1.57" d, 7 oz..... **Closeout \$129.99**

DJ-196T 2M HT Same as the DJ-195T w/back-lit keypad. **\$169.99**

DJ-496T 440 HT Same as the DJ-196T • 430-450MHz..... **\$179.99**

Available Accessories

EBC6 Mobile HT bracket, EBP48N 9.6V 700mA SW NiCad battery, EDC16B Cigarette lighter cable and filter, EDC36 Angle plug power cable with filter, EDC37 13.8V power cable with filter, EDC43 Cigarette lighter cable, EDC88 Rapid charger, EDH30 Dry cell battery case, EME12 Headset/earphone/ microphone with VOX, EME13 Head-set/ear bud/microphone with VOX, EME15 Earphone/microphone with VOX, EME16 Tie-pin microphone with earphone, EME17 Boom earphone microphone, EME6 Earphone, EMS47 Speaker microphone with volume control, EMS51 Speaker microphone, ERW4 PC cable, ESC36 Soft case for EBP48N



ALINCO 2001

Alinco proudly introduces several innovative new radios! Check out the DR-135T, DJ-196T, DJ-496T and the DJ-X2T pocket receiver. Alinco's Toyama facility is **ISO 9002** certified. With Alinco, you get solid engineering, superb quality and affordable prices. That's why we're known as **Amateur Radio's Value Leader™!**

DJ-V5TH 2m/440 HT* **NEW!**

NEW! Extended Rx from 76 ~ 999 MHz includes wide band FM, alphanumeric display, 200 Memories, CTCSS encode+decode, 5 watts output, compact size, 4 scan modes, 5 scan banks, split-band operation for satellite, auto-dialer, 13.8 VDC direct input and more!

DJ-V5TDC(H) 2m/440 HT **NEW!**

NEW! See-through version includes all the same great features of DJ-V5TH. With a clear ice blue case, the whole panel is illuminated in low light conditions for great night and emergency use. DJ-V5TDC is powered by a see-through dry-cell pack while the DJ-V5TDC(H) comes with additional NiCd battery pack and charger.

DJ-196T (2m), DJ-496T (440 MHz) HT **NEW!**

NEW! Backlit keypad, alphanumeric display, 40 memories, CTCSS encode+decode, DCS, auto-dialer, burglar alarm, 13.8 VDC direct input, experimental mosquito repel tone! Comes with high power battery.

DJ-180TH (144 MHz)*, DJ-280TH (222 MHz)*, DJ-480T (440 MHz)

Proven performers, super value! 10 memories expandable to 50 or 200, illuminated display, CTCSS encode+decode.

DJ-C5T 2m/440 "Credit Card" HT

"Credit Card" size, internal speaker, 50 memories, CTCSS encode+decode, AM airband RX, 300 mw output, soft case, 600 mAh lithium-ion battery, charger included!

DJ-S11T (144 MHz) HT DJ-S41T (440 MHz) HT

"Pager size", 21 memories, easy to operate and program, great TX and RX audio, self-storing pivot antenna, uses AA batteries, 340 mw output, fits in pocket or purse. Amazing low price! Mobile DC cable and speaker mics also available.

DJ-G5TH 2m + 440 HT*

Our most popular dual-bander, up to 5 watts output, Channel Scope™ display, 100 memories/band, CTCSS encode+decode, AM airband RX, programmable second PTT, full duplex and crossband repeater capabilities, 13.8 VDC direct input, illuminated keys and display, RF attenuator and more!

*Optional 2 watt batteries available.

DR-M03SX (10m/10 watts) DR-M06TH (6m/20 watts) FM Mobile/Base

Local and DX FM communications can be yours! Great for simplex or repeater operations, includes CTCSS encode (decode optional), 100 memories.

DR-135T/TG, DR-135TP/TPG **NEW!** 2m FM Mobile/Base

NEW! 2 meter TX/RX + Airband (AM) RX. Ignition key power control, theft alarm, narrow band FM, 7 place alphanumeric display, front panel data input, **optional internal packet module can be used with APRS™**, true 9600 packet mode operation, rear panel DSUB9 connection. 5/10/50 watt power settings, 100 memories, 10 autodial memories, CTCSS and DCS encode/decode, backlit mic, and more! Available in black (T, TP) or pewter (TG, TPG).

DR-150TQ (CTCSS decode) 2m FM Mobile/Base

Channel Scope™ display, remote control and frequency entry capability from multi-function mic keypad, 50 watts, 100 memories, airband + 440 ~ 450 MHz RX, 2 VFOs, auto-dialer, 9600 packet port, CTCSS. For demanding 2m FM operators.

DR-605TQ (CTCSS decode) 2m/440 Mobile/Base

Value Leader! 50 watts VHF/35 watts UHF, 51 memories/band, 430 ~ 449.995 MHz range allows for satellite work, crossband repeater operation, 9600 packet port. Check the super low price! Dual band, dual RX.

DR-610TQ (CTCSS decode) 2m/440 Mobile/Base

Detachable face, 50 watts VHF/35 watts UHF, Channel Scope™ display, 120 memories, 2 VFOs, AM airband RX, V/U, V/V, U/U, U/V operation, RF attenuator, CTCSS, more! Direct frequency and remote control capability from multi-function mic keypad. Crossband repeat and DTMF command control.

DX-70TH (100w) HF + 6m Mobile/Base/Portable

160 ~ 6m Amateur band TX in all modes, removable face, general coverage RX from 150 KHz ~ 30 MHz and 50 ~ 54 MHz. 2 VFOs, 100 memories, speech compressor, SSB, CW and AM narrow filters, full, semi or automatic break-in, multi-function control, and MUCH more! Ask about optional EDX-1 or EDX-2 antenna tuners.

DX-77T HF Base/Portable

160 ~ 10m Amateur band TX in all modes. Clean, crisp RF modulation, easy to operate! Low noise floor from DDS. 500 KHz ~ 30 MHz general coverage RX, 2 VFOs, internal keyer (6 ~ 50 wpm), 100 memories, 13.8 VDC input, speech compressor, CTCSS encode for 10M operation, CW filter standard. Compatible with EDX-1 or EDX-2 antenna tuners.

Simple ■ Clean ■ Dependable

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Regular blocked. Specifications subject to change without notice or obligation. Performance specifications apply only to Amateur bands. Permit required for MARS/CAP use. Products intended for use only by properly licensed Amateur Radio operators.

There's something magical about amateur radio. The fact that you can speak into a little box and communicate with someone else on the other side of town, or even on the other side of the world, with nothing between you and that person but thin air...what an incredible, powerful feeling. It feels like magic.

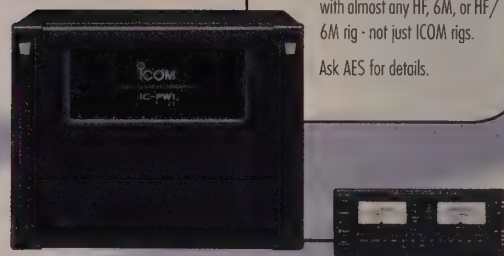


IC-PW1

Great for Contesting and DX'peditions

Give your desktop station 1kW of power. Remote control head, 100% duty cycle, compact size. Can be used with almost any HF, 6M, or HF/6M rig - not just ICOM rigs.

Ask AES for details.



IC-718

Perfect for beginners - advanced performance at a start-up price

- 100W (AM 40W)
- All Mode
- Big, Well Spaced Keys and Dials
- 500 kHz-30.0 MHz Receiver
- IF Shift
- Auto Tuning Step
- Direct Frequency Input Via Front Panel Keypad
- AF-DSP*
- Large Backlit LCD Display
- Built-in Keyer
- VOX
- Compact Size (DX'peditions?)
- PC Programmable*

WORK THE MAGIC



Most ICOM rigs are PC programmable with select ICOM options



IC-746

Advanced HF performance w/6M & 2M

- 100W
- All Mode
- Full Duty Cycle
- Quad Conversion Receiver
- IF-DSP
- Front Panel Adjustable NR
- Audio Peak Filter
- Auto Notch Filter
- 3 Optional Filter Positions
- Twin Passband Tuning
- 4.9" LCD/Dot Matrix Display
- CW Memory Keyer
- VOX
- Auto Antenna Tuner
- PC Controllable*



IC-775DSP

Pull out the weak signals!

- 200W
- All Mode
- IF-DSP with Noise Reduction, Auto and Manual Notch, Audio Peak Filter, and Twin Passband Tuning
- Adjustable Noise Blanker
- Dual Watch
- Adjustable AGC
- CW Keyer
- Auto Antenna Tuner
- VOX
- CTCSS Encoder
- Internal Auto Antenna Tuner
- PC Controllable*



IC-756PRO

This new HF/6M rig pushes digital to new levels! With 32 bit IF-DSP

- 100W
- All Mode
- Triple Conversion Rx
- Dual Watch
- 32 Bit IF-DSP
- Front Panel Adjustable NR
- Audio Peak Filter
- Auto & Manual Notch Filter
- Twin Passband Tuning
- 5" TFT Color Display
- CW Memory Keyer
- VOX
- Auto Antenna Tuner
- PC Controllable*



IC-781

The Ultimate Ham Rig

- All Mode, 150W
- Features all the Bells and Whistles
- Built-in Power Supply
- Twin PBT
- Adjustable AGC
- CRT Display with Band Scope
- PC Controllable*





IC-W32A

Advanced dual bander

- 2M/440MHz
- 5W@9.6VDC
- 200 Memories
- Alphanumeric Display & Paging
- V/V, V/U, U/V, U/U
- Backlit Keypad
- Wide Rx†

IC-Q7A

Super small size, big sound

- 2M/440MHz
- Mini Size
- Big Audio
- 30 to 1300 MHz Rx† (Cell Blocked)
- Advanced Scanning
- Includes "AA" Ni-Cds, Charger
- Work One Band at a Time



IC-T22A

Shirt pocket small, big performance

- 2 Meters
- Easy to Use
- Alphanumeric Display
- Wide Rx, Air Band†
- 5W@13.5V DC*
- 3W@9.6V DC Standard
- 80 Memory Channels



IC-T81A

World's First QUAD Band HT

- Easy to Use
- 6M/2M/440MHz/1.2GHz
- Wide Band Rx†
- 5W@13.5VDC*, 1W/1.2 GHz
- Ni-Mh Battery
- Auto Repeater
- Water Resistant



IC-T2H

Police radio rugged

- 2 Meters
- Super Rugged
- 6W @ 9.6V DC
- 500 mW Audio
- 8 Front Panel PC Programmable* Keys
- 2 AA Ni-Cds & Wall Charger Included
- Our most affordable

IC-T7H

Powerful performance

- 2M/440 MHz
- Easy to Use
- Up to 6 Watts
- Work One Band at a Time
- Air Band Rx†
- Pocket Beep
- Auto Repeater

IC-2100H

Rugged 2 Meter, large controls

- 55 Watts
- Easy to Use
- Full Function Mic
- IMD Fighter
- MIL SPEC 810††
- Large Green/Amber LCD
- Large Keys and Knobs

IC-706MKIIG

The most versatile series of compact, multi-band rigs ever made

- HF/6M/2M/440MHz
- 100W on HF, 100W on 6M, 50W on 2M, 20W on 440 MHz
- AF-DSP
- Plug and play filters - no soldering
- Easy-to-navigate menus
- Auto repeater
- CTCSS encode/decode
- Backlit keys

IC-2800H

Audio excellence and video excitement

- 2M/440MHz
- 3" (d) TFT Color LCD Screen
- NTSC External Video Input
- WFM & AM (Rx Only), FM
- 50W/2M, 35W/70CM
- 9600 bps Packet Data Port
- V/U, U/V, Dual Band, Cross Band Repeat
- Independent Band Controls
- Air Band Rx†

IC-207H

Super compact, Detachable Control Panel*

- 2M/440MHz
- 2M(45W)/440 MHz(35W)
- Work One Band at a Time
- Up to 9600 bps Packet*
- Air Band RX†
- MIL STD 810††



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SINGLE BAND HANDHELDS

DJ-180TH 2M FM HT Simple operation with advanced technology. 5W output with supplied 12V NiCad battery pack battery • Transmit: 144-148 MHz; Receive range: 130-173.995MHz • 10 multi-function memory channels (expandable to 50 or 200 channels) • 38-tone encoder • 1750Hz tone burst • Auto power off • Low battery indicator • Highly visible illuminated LCD display • 16 digit DTMF pad • 6.4" h x 2.2" w x 1.3" d, 14 oz. **\$149.99**

DJ-280TH 220MHz FM HT Looks the same and has most of the same specifications as the DJ-180TH (above), but covers 222-225MHz FM. • Receive: 220-224.995MHz • 5W output with supplied 12V NiCad • Non-standard repeater offset capable • Encoder/decoder installed..... **\$169.99**

DJ-480T 440MHz FM HT Looks similar and has most of the same specifications as the DJ-180TH and DJ-280TH (above), but covers the 440 band. • 2W • 5.2" h x 2.3" w x 1.3" d..... **Special Order \$199.99**

Available Accessories

EB3C Belt clip, EBP24N 7.2V 1200mA battery, EBP26N 7.2V 700mA NiCad battery, EBP28N 12V 700mA NiCad battery, EDC16B Cigarette light cable with filter, EDC36 Angle plug power cable with filter, EDC37 13.8V power cable, EDC43 Cigarette lighter cable, EDC45 Desk quick charger, EDC49 Battery charger for EBP24/26/28N, EDH11 Battery holder, EDH12 DC jack adapter, EJ14U 50 channel memory, EJ15U 200 channel memory, EME11 Ear-phone mic with PTT/VOX, EME12 Headset/earphone/microphone with VOX, EME13 Headset/ear bud/microphone with VOX, EME15 Earphone/microphone with VOX, EME16 Tie-pin microphone with earphone, EME17 Boom earphone microphone, EME6 Earphone, EMS51 Speaker mic, ESC18 Case, ESC19 Case

DUAL BAND HANDHELDS

DJ-C5T Credit Card Sized 2M/440MHz Dual Band HT 300mw output • Transmits: 144-147.995 & 420-449.995 MHz • Receives: 118-173.995 and 420-449.995MHz • 50 memory channels • CTCSS tone encode/decode standard • Internal speaker • Volume/squelch control • Keylock • Auto power off with Morse Code alert • Mic/earphone jack • TX lamp • Pivoted membrane keys • Free offset • Reverse monitor • Scan

function with skip setting • Multi European tone bursts • Battery save mode • Channel display mode • AM aircraft receive with expanded VHF wideband reception • Rechargeable 3.8V Lithium-ion battery • Two-hour "snap-in" charger • Soft case • 3.75" h x 2.25" w x 0.43" d, 3 oz..... **\$149.99**

Available Accessories

EDC16B Cigarette light cable with filter, EDC36 Angle plug power cable with filter, EDS7 Microphone adapter, EME12 Headset/earphone/microphone with VOX, EME13 Headset/ear bud/microphone with VOX, EME15 Earphone/microphone with VOX, EME16 Tie-pin microphone with earphone, EME17 Boom earphone microphone, EME18 Earphone, EMS49 Mini lapel speaker microphone, EMS50 Speaker microphone, ESC34 Soft case with belt clip



EDC60 Quick charger, EDH16 Dry cell battery case, EME12 Headset/earphone/microphone with VOX, EME13 Headset/ear bud/microphone with VOX, EME15 Earphone/microphone with VOX, EME16 Tie-pin microphone with earphone, EME17 Boom earphone microphone, EME6 Earphone, EMS47 Speaker mic with volume control, EMS51 Speaker microphone, EMS8Z Remote speaker mic, ESC28 Soft case for EBP33N, ESC29 Soft case for EBP37N, ESC30 Soft case for EBP34/35/36N

DJ-V5TH VHF/UHF Dual Band FM HT Full 2 meter and UHF Amateur band coverage

• Standard high-power 700 mAh NiCad battery pack – up to 5W output • 3 output settings • Expandable receive range 76-999MHz (cellular blocked), includes wide FM capability • Split-band operation capability • Eight different tuning steps • Alpha-numeric display – up to 6 characters • 200 memory channels plus two call channels • CTCSS encode/decode • DTMF squelch • 4 different European tone bursts • 4 scan modes and 5 programmable scan banks • MARS/CAP capability • Auto-dialer memories • Auto high temperature protection feature • SMA antenna connector • Wire cloning capable • Accepts up to 13.8V DC input • 4 1/2" h x 2 1/2" w x 1 1/4" d, 13 oz..... **\$239.99**

DJ-V5TDCH Includes all the features of the DJ-V5TH but is housed in a blue see-through case which shows off the internal components. Comes with a see-through alkaline battery case, black NiCad battery and charger..... **\$259.99**

Available Accessories

EBP45N 6V 700mA 2W NiCad battery, EBP46N 9.6V 700mA 5W NiCad battery, EDC16B Cigarette light cable with filter, EDC36 Angle plug power cable with filter, EDC37 13.8V power cable, EDC43 Cigarette lighter cable, EDC91 Quick charger, EDH29 Dry cell battery case, EME12 Headset/earphone/microphone with VOX, EME13 Headset/ear bud/microphone with VOX, EME15 Earphone/microphone with VOX, EME16 Tie-pin microphone with earphone, EME17 Boom earphone microphone, EME6 Earphone, EMS47 Speaker mic with volume control, EMS51 Speaker microphone, EMS8Z Remote speaker mic, ESC35 Soft case for EBP45N/46N

DJ-G5TH VHF/UHF Twin Band HT Transmits: 144-147.995/438-449.995MHz Receives: 108-173.995 (including AM)/420-480MHz • 5W output @ 13.8V DC • CTCSS tone squelch • Memory channels: VHF 80, UHF 80 • Scanning: memory, band or programmed • ChannelScope™ • DSQ selective call • 20 auto-dialer memories • Full duplex cross band repeater function • Cloning function • Low battery indicator • Auto power off • Time-out timer • 5.4" h x 2.25" w x 1.1" d, 13 oz **\$239.99**

Available Accessories

EBC6 Mobile HT bracket, EBP33N 4.8V 650mA NiCad battery, EBP34N 4.8V 1200mA NiCad battery, EBP35N 7.2V 900mA NiCad battery, EBP36N 9.6V 650mA NiCad battery, EBP37N 4.8V 700mA NiCad battery, EDC16B Cigarette light cable with filter, EDC36 Angle plug power cable with filter, EDC37 13.8V power cable, EDC43 Cigarette lighter cable, EDC60 Quick charger, EDH16 Dry cell battery case, EME12 Headset/earphone/microphone with VOX, EME13 Headset/ear bud/microphone with VOX, EME15 Earphone/microphone with VOX, EME16 Tie-pin microphone with earphone, EME17 Boom earphone microphone, EME6 Earphone, EMS47 Speaker mic with volume control, EMS51 Speaker microphone, EMS8Z Remote speaker mic, ESC28 Soft case for EBP33N, ESC29 Soft case for EBP37N, ESC30 Soft case for EBP34/35/36N



2M SINGLE BAND HANDHELDS

IC-2GXAT/HP 2M Transceiver 7W output @ 13.5 V DC • 144-148MHz rx (136-174MHz expandable) • 40 mem. channels • 700mAh battery • Auto repeater operation • Tone scan • DTMF redial and five auto dial memories • 350 mW audio • Selectable DTMF speed • Built-in PL enc/dec • 35mA current drain • 2.2" w x 4.9" h x 1.4" d, 12.9 oz **\$249.99**

Available Accessories

AD25 Battery charger adapter, AD28 Battery pack adapter/rapid charger, BC105A Wall charger, BC11911 Desk charger, BP130A Battery case, BP157A 900mA 7.2V battery, BP160 700mA 7.2V battery, BP174 600mA 12V battery, CP13 Cigarette cable with filter, CP13L Right angle cigarette cable with filter, HM46 Slim-line speaker mic, HM46L Slim-line speaker mic with right angle plug, HM54 Heavy-duty speaker mic, HS51 Headset/VOX, LC116 Case for 2GXAT/BP130/157A/160, LC117 Case for 2GXAT/BP132A, MB30 Mobile or wall bracket, OPC288 Mini DC power cord, SP13 Earphone, UT49 DTMF decoder



IC-T2H 2 Meter Handheld 6W output @ 9.6 V DC • 136-174MHz receive • 43 memory channels • Tone squelch (CTCSS enc/dec) standard, with pocket beep and tone scan • 8 programmable keys • 5 DTMF memory channels, with up to 32 digits codes and redial for autopatching repeaters • 10 weather channels • Direct keypad frequency entry • Backlighted LCD display • Auto repeater function • "Intuitive" help function (display directs user what to do next when making selections) • 2-step power save function • Monitor function • Lock function • One-piece, die-cast aluminum chassis and super tough polycarbonate casing • Meets MIL SPEC C/DE for shock and vibration • Includes rechargeable "AA" NiCad batteries and charger, or use alkalines • 2.3" w x 5.5" h x 1.3" d, 14.8 oz **\$139.99**

With the IC-T2H & a PC you can download stored frequencies, like those in a repeater directory, from your PC directly into the IC-T2H. Take up to 40 pre-programmed frequencies with you! PC-to-IC-T2H and IC-T2H-to-IC-T2H cloning requires optional software and cables.

Available Accessories

AD81 Adapter for BC11911, BC11911 Desk charger, BC110A Wall charger, BC133 Drop-in trickle charger, BP194 "AA" alkaline battery case, BP195 700mA 9.6V battery, BP196 1050mA 9.6V battery, CP12L Right angle cigarette cable with filter, CST2 DOS programming software, CSWHH4 Windows software with cable, HM46 Slim-line speaker mic, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS51 Headset/VOX, LC145 Carrying case, OPC254L Right angle mini DC power cable, OPC474 Radio-to-radio clone cable, OPC478 PC cable, SP13 Earphone

With the IC-T2H & a PC you can download stored frequencies, like those in a repeater directory, from your PC directly into the IC-T2H. Take up to 40 pre-programmed frequencies with you! PC-to-IC-T2H and IC-T2H-to-IC-T2H cloning requires optional software and cables.

FREE ITEMS included with some radios.
See Price Guide for details.



IC-T22A 2 Meter Handheld
5W output @ 13.5 V • 4.0 - 16 VDC input • 136-174MHz rx • Auto low power/power saver (15mA drain) • Remote control microphone (optional HM-75A) • 80 memory channels (40 with alpha display) • VHF/UHF air band receive • Auto repeater function • Backlit display • Die cast aluminum frame and heat sink • Optional tone scan • 2.3" w x 4.3" h x 1.1" d, 10.9 oz..... **\$249.99**

Available Accessories

AD56 Battery pack adapter/rapid charger, BC110A Wall charger, BC11911 Desk charger, BP170 Battery case, BP171 700mA 4.8V battery, BP172 950mA 4.8V battery, BP173 600mA 9.6V battery, BP180 600mA 7.2V battery, CP12 Cigarette cable with filter, CP12L Right angle cigarette cable with filter, FA1443B 2M/440 duck, HM46 Slim-line speaker mic, HM46L Slim-line speaker mic with right angle plug, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS10 Boom mic/headset, HS10SA VOX unit, HS10SB PTT switchbox, HS85 Headset with VOX, LC125 Case for T22A with BP170/71/72, LC126 Case for T22A with BP173, MB30 Mobile or wall bracket, NCP1 Nylon chest pack, OPC254 Mini DC power cable, OPC254L Right angle mini DC power cable, SP13 Earphone, UT94 Tone squelch

DUAL BAND HANDHELDS

IC-W32A 2M/440MHz Dual Band HT 5W output @ 13.5V DC • 144-148, 440-450 transmit; 118-174, 400-470 receive • 200 memory channels • 8 character alpha-numeric memory channel identification • Key-pad entry • Backlit display and keypad • Handheld-to-handheld cloning capability with optional OPC-474 cable or PC programming capability with optional CS-W32 cloning software and OPC-474 cable • In-dependent band controls for tuning and volume • VHF/UHF exchange function allows assignment of VHF/UHF band controls to either knob - set preferred band to the knob furthest from the antenna • Meets MILSPEC C/D/E for shock and vibration • 2.25" w x 5.5" h x 1.4" d, 16 oz..... **\$269.99**



Available Accessories

AD51 Battery pack adapter/rapid charger, BC110A Wall charger, BC11911 Desk charger, BP170 Battery case, BP171 700mA 4.8V battery, BP172 950mA 4.8V battery, BP173 600mA 9.6V battery, BP180 600mA 7.2V battery, CP12 Cigarette cable with filter, CP12L Right angle cigarette cable with filter, CSWHH4 Windows software with cable, CSW32 DOS programming software, FA1443B 2M/440 duck, HM46 Slim-line speaker mic, HM46L Slim-line speaker mic with right angle plug, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS10 Boom mic/headset, HS10SA VOX unit, HS10SB PTT switchbox, HS85 Headset with VOX, LC128 Carrying case, MB30 Mobile or wall bracket, NCP1 Nylon chest pack, OPC254 Mini DC power cable, OPC254L Right angle mini DC power cable, OPC474 Radio-to-radio clone cable, OPC478 PC cable, SP13 Earphone



IC-T7H 2M/440MHz Dual Band HT 5W output with a standard BP-173 battery pack (9.6V/ 650mAh) • Up to 6W output @ 13.5V DC (optional DC power cable required) • Transmit 144-148MHz and 440-450MHz; Receive 118-174MHz and 400-470MHz • More than 250mW audio output • One-touch band switching • Priority watch - Monitor a frequency on the same band or a different band • 70 memory channels • 9 DTMF memories for auto dialing • CTCSS tone encode/decode • 50 independently programmable tone frequencies • Auto power saver with selectable duty • Auto repeater function • Auto power OFF function • Thumb-touch lock settings feature

• Internal guide function • LCD backlighting for easy night operation • Wall charger included • PC programmable (optional CS-T7 cloning software required) • 2.3" w x 4.8" h x 1.1" d, 14.3 oz **\$199.99**

Available Accessories

AD56 Battery pack adapter/rapid charger, BC11911 Desk charger, BP170 Battery case, BP171 700mA 4.8V battery, BP172 950mA 4.8V battery, BP173 600mA 9.6V battery, BP180 600mA 7.2V battery, CP12 Cigarette cable with filter, CP12L Right angle cigarette cable with filter, CS77 DOS programming software, CSWHH4 Windows software with cable, FA1443B 2M/440 duck, HM46 Slim-line speaker mic, HM46L Slim-line speaker mic with right angle plug, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS10 Boom mic/headset, HS10SA VOX unit, HS10SB PTT switchbox, HS85 Headset with VOX, LC136 Case for T7H with BP170/171/172, LC137 Case for T7H with BP173/180, MB30 Mobile or wall bracket, NCP1 Nylon chest pack, OPC254 Mini DC power cable, OPC254L Right angle mini DC power cable, OPC478 PC cable, SP13 Earphone



IC-Q7ABC Ultra Compact 2M/440MHz Dual Band HT with Full Feature Scanner Extra easy to use and wide FM performance • Output power: 350mW (VHF), 300mW (UHF) • Transmit: 144-148MHz and 440-450MHz triple conversion • Receive: 30-1300MHz (cell blocked on U.S. model) • 200 memory channels • Superior audio in its class from large 1.4" speaker and 100mW audio output • CTCSS tone encoder/decoder with pocket beep • Easy to use - only 7 buttons (including power) and a large, easy to grasp tuning dial • Automatic repeater function • Channel operation • Tone scan • 10 tuning steps • Easy reverse • Dual watch

• RIT function • Auto power OFF power saver • Manually or automatically controlled LCD backlighting for easy low light operation • Meets MILSPEC C/D/E for shock and vibration • Includes 2 "AA" size Ni-Cd batteries, or use "AA" alkaline batteries • 2.3" w x 3.75" h x 1.1" d, 6 oz **\$134.99**

Available Accessories

AD92SMA SMA-BNC adapter, BC127A Charger for 2 or 4 "AA" NiCads, HM46 Slim-line speaker mic, HS85 Headset with VOX, LC146 Carrying case, OPC782 Plug adapter cable, SP13 Earphone

FREE ITEMS included with some radios.
See Price Guide for details.

QUAD BAND HANDHELD

IC-T81A 6M/2M/440MHz/1.2GHz Quad Band 4.5W w/ supplied BP-200 • Up to 5W output @ 13.5V DC (1W on 1.2GHz) • Transmits: 6M, 2M, 440MHz, 1.2GHz • Wide band receive: 50-54MHz, 74-174 MHz, 400-470MHz, 1240-1300MHz • Broadcast FM receive (some TV) • Airband receive • 124 memory channels, 10 scan edges and 1 call per band • Tone squelch/scan (CTCSS enc/dec) • DTMF encoder, 9 memories • Backlit display with timer • Built-in guide function • Ni-MH powered; wall charger included



• Battery voltage indicator • RIT/XIT (VXO) for 1.2GHz (±5kHz in 1kHz steps) • Multi-function "joystick" switch • HT-to-HT cloning capability w/opt. cable • PC programmable w/opt. software and cable • Water resistant to JIS grade 4 • 2.3" w x 4.2" h x 1.1" d, 9.9 oz **\$299.99**

Available Accessories

AD87 Battery pack adapter/rapid charger, AD88 PCB board, AD92SMA SMA-BNC adapter, BC11931 Desk charger, BP197 3 "AA" battery case, BP198 700mA 4.8V NiMH battery, BP199 700mA 6V NiMH battery, BP200 680mA 9.6V NiMH battery, CP12 Cigarette cable with filter, CP12L Right angle cigarette cable with filter, CST81 Windows cloning software, HM46 Slim-line speaker mic, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS51 Headset/VOX, HS85 Headset with VOX, LC148 Carrying case, OPC254 Mini DC power cable, OPC254L Right angle mini DC power cable, OPC474 Radio-to-radio clone cable, OPC478 PC cable, SP13 Earphone



SINGLE BAND HANDHELDS

TH-22ATH 2M FM Handheld This is a super-compact and lightweight transceiver with impressive performance. EZ to use menu system. Palm-sized, sharply styled, easily slips into pocket. • 5W output from MOS FET power module and standard PB-34 Ni-Cd battery • 136-174 receive • RF output control (Hi/Low/EL) • 144-148MHz coverage • 40 memory channels stored in EPROM (plus 1 call channel) • Auto repeater offset • Multiple scan functions (VFO, call and memory) • Dual Scan



stop modes (CO and TO) • CTCSS encode • DTSS and page • Luminescent keypad and LCD with backlighting • Built-in DTMF keyboard • (5) 15-number DTMF memories • Tone Alert with time indicator • Selectable squelch configuration • Busy channel lock out • Battery voltage indicator • Automatic power off • Drop-in desktop charger • 2.1" w x 6.1" h x 1.12" d, 11 oz **\$229.99**

Available Accessories

BT9 Four "AA" battery holder, EMC3 Label clip mic/earphone PC, HMC3 VOX/boom mic headset, KSC14 2 pack rapid charger, KSC8A Drop-in charger, PB33 1200mA 6V battery, PB34 600mA 9.6V 5W battery, PG2W DC cable, PG3J Cigarette cord with filter, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys, TSU8 CTCSS decoder, WR2 Water resistant bag



DUAL BAND HANDHELDS

TH-D7A(G) 2M/440MHz Dual Band Data Communicator Equipped with a built-in TNC for simple packet operation or use with a GPS as a full function APRS™. Reports position, speed and heading as well as calculation of distance to destination. Can also be used for APRS™ messaging – send up to 45 character messages without a PC. Advanced functions and capabilities possible with the VC-H1 • 5.5W output @ 13.6V DC • 2M: 144–148MHz tx, 118–174MHz rx • 440MHz: 430–450MHz tx, 400–480MHz rx • 1200/ 9600



baud TNC • Station list stores data in up to 40 memory channels • Grid square locator display • Dual receive on same band for voice and data (VHF only) • 200 mem. channels • PC programmable for frequency and name (PG-4W required) • 16 backlit keys • CTCSS enc/decode • MIL-SPEC 810C/D/E water resistant • 10 channel DTMF phone and auto patch memories • TM-V7A and TM-742D DTMF remote • Altitude • Time • 3-position memory • NMEA9600 • 3-memory text • Position ambiguity • Audible emergency signal • Auto message response • Data band settings • 1750 MHz packet burst • 4 1/4" h x 2 1/4" w x 1 1/2" d, 12 oz **\$399.99**

Available Accessories

BC19 Rapid charger, BT11 Four "AA" battery holder, EMC3 Lapel clip mic/earphone PC, HMC3 VOX/boom mic headset, J29063113 Belt clip, PB38 650mA 6V NiCad battery, PB39 600mA 9.6V 5W battery, PG2W DC cable, PG3J Cigarette cord with filter, PG4V VCH1 connector cable, SC47B Black soft case, SC47OR Orange soft case, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys

TH-G71A Dual Band FM HT

Its ergonomic design, illuminated and back lit display all combine to make operation a breeze. The EZ to use menu system gives full control over all operating settings. • 6W (VHF), 5.5W (UHF) @ 13.8V DC • 2M: 144–148 tx/rx and 118–174 MHz ext. receive including Aircraft, 440MHz: 430–450MHz tx and 400–470MHz rx • 200 multi-function memory channels • Memory name function • Multiple scan modes • CTCSS tone scan • DTMF memory (10 channels) • DTMF remote control • Function key lock • Auto battery saver circuit • Auto power-off • Time-out timer • Illuminated keypad • PC ready • High performance antenna • TM-V7A remote control • MIL-STD 810E approved • 2.3" w x 4.4" h x 1.3" d, 11.6 oz **\$269.99**



Available Accessories

BC19 Rapid charger, BT11 Four "AA" battery holder, EMC3 Lapel clip mic/earphone PC, HMC3 VOX/boom mic headset, J29063113 Belt clip, PB38 650mA 6V NiCad battery, PB39 600mA 9.6V 5W battery, PG2W DC cable, PG3J Cigarette cord with filter, PG4P PC control cable, SC45 Soft case for G71A with PB38/39, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys, WR2 Water resistant bag



TH-79AKSS 2M/440MHz Dual Band Handheld • MOS-FET FET power module • 5W output on both bands with standard PB-34 Ni-Cd battery or 13.8V DC • FET power module for longer operating times per charge • 3-position output power control (High, Low, Economy Low) • 2M: 144–148 MHz with extended receive 118–174MHz; 440MHz: 438–450MHz • 82 non-volatile memory channels with ID – store 7 characters with each channel • Auto repeater offset (VHF) • Cross-band repeater function with full duplex • Ability to receive two frequencies on the same band (VHF+VHF, UHF+UHF) simultaneously • CTCSS enc/decoder • Dot-Matrix LCD and user friendly menu system • Alphanumeric access to guide

function (no need to carry a manual) • Wireless cloning • Modifiable for MARS/CAP (permits required) • Auto power-off and battery save function • 5.1" h x 2.1" w x 1.3" d, 11.6 oz **\$379.99**

Available Accessories

BT9 4AA battery holder, EMC3 Lapel clip mic earphone PC, HMC3 VOX/boom mic headset, KSC14 2 pack rapid charger, KSC8A Drop-in charger, PB33 1200mA 6V battery, PB34 600mA 9.6V 5W battery, PG2W DC cable, PG3J Cigarette cord with filter, SC41 Soft case for 79AKSS with PB32, SC43 Soft case for TH79 with PB33/34, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys

VISUAL HT ACCESSORY

VC-H1 SSTV Visual Communicator A compact and easy to use portable SSTV unit that is compatible with FM VHF/UHF transceivers along with FM and SSB HF modes. Receive digital images quick (17 seconds download @ 9600 baud). For camping trips, Field Day, or disaster communication. Imagine sending images across town or across the world on VHF/UHF. It also integrates with your PC to store and label all your favorite pictures for future transmission.



1/4-inch, 270,000-pixel CCD camera • 360-degree rotatable and detachable camera head • 1.8-inch TFT color LCD monitor. Up to 10 picture memory • Built-in microphone and speaker • Connect to a Kenwood handheld, mobile or HF transceiver with an optional cable • Computer connectivity with an optional connection kit • AA alkaline or 110 volt AC adapter operation • Operates all Slow Scan modes • Callsign superimpose • Auto Power Off • Transmits to another radio or PC (with power supply and software) • Accepts input from cameras .. **\$309.99**

Available Accessories

E30335208 16-pin DIN plug/cable, E59040708 16-pin DIN plug, KCT245 VCH1-to-PC software and cable, PG4T VCH1-to-Kenwood FM mobile cable, SC46P Protective case, VCIS Kenwood/AOR software and cable

FREE ITEMS included with some radios.

See Price Guide for details.



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SINGLE BAND HANDHELDS

FT-23 MKII/12 2M FM HT An old favorite still enjoying great popularity due to low cost and useful features. • 5W output with standard battery • Transmit/receive range: 144–148MHz • 10 memory channels, 7 store splits • Battery saver • LCD display with S meter • Rugged aluminum alloy case with water resistant seals • Optional CTCSS enc/decode & DTMF pad • 4.8" h x 2.3" w x 1.3" d, 15 oz **\$149.99**



FT-33R 220MHz FM HT Same as the FT-23MKII/12 (above), but with transmit/receive range of 220–225MHz **\$249.99**

Available Accessories

CLIP1 Belt clip, CSC24S Case, CSC28 Case, FBA17 Battery holder, FNB12S 12V 600mA battery, FNB14 7.2V 1000mA battery, FNB17 7.2V 600mA battery, FTS12 Encoder/decoder, FTT4 TTP unit, MH30C2B Speaker mic, MH34C2B Speaker mic, MH35A2B Speaker mic with lapel clip and earphone jack, NC28B Wall charger, NC34B Wall charger, NC65B Wall charger for NC18B/38B, PA6 DC adapter, YH2 VOX headset with mic

VX-150 2M Ultra Rugged

FM HT Designed to perform under the most difficult operating conditions. Packed with leading edge features. A die cast aluminum case houses the electronics and large, high output speaker. The illuminated keypad and Omni-Glow™ display provides easy operation during nighttime operation. 5W output with standard battery • Three power output levels • Transmit range: 144–148MHz • Receive range: 140–174MHz • 209 memories • SmartSearch™ auto memory loading • Keypad with 16 multi-function keys • Two user-definable keypad



function keys • 8 character alphanumeric display • Priority monitoring • Dual watch • Alphanumeric recall • Memory bank and preferential memory scanning • VFO search • Automatic repeater shift • ARTS™ Auto-Range Transponder • Wide and narrow deviation selection • 1750 Hz tone calling • Programmable menu mode for feature customization • Transmit and receive battery savers • Automatic power off • MIL-STD 810D/E rating • 4.2" h x 2.3" w x 1.1" d, 11.5 oz **\$129.99**

Available Accessories

ADMS1F Programming software, CN3 BNC-SMA adapter, CT27 Cloning cable, CT44 2-pin speaker mic adapter, EDC5B DC adapter/filter, EDC6 DC adapter; plug/wire only, FBA25 6 "AA" cell battery case, FNBV57 7.2V 1100mA battery, FNB64 7.2V 700mA battery, LCC150/TT Leather case, LCC150S/TT Leather case/swivel, MH34C4B Speaker mic, MH37A4B Earpiece and mic, NC72B Extra wall charger, VAC400B One-hour rapid charger, VC25 VOX headset

we have a

SECURE web site
at **www.aesham.com**

FT-411MKII/12 Compact CPU Controlled 2M FM Transceiver Covers 144-148 MHz • 5W output with supplied 12V NiCad battery pack • 49 channel memories plus 10 DTMF memories • Multi-function scanning • LCD display • Full display information • Adjustable power saver, auto-shutoff • Lit display/keypad, musical keys • VOX • 2.2" w x 6" h x 1.2" d..... **\$159.99**

Available Accessories

CA7 Two charging sleeves, CLIP1 Belt clip, CSC35 Case for unit with FNB17, CSC36 Case for unit with FNB10/FBA10, CSC37 Case for unit with FNB12S/14, FBA17 Battery holder, FNB12S 12V 600mA battery, FNB14 7.2V 1000mA battery, FNB17 7.2V 600mA battery, FTS17A

Encoder/decoder, MH30C2B Speaker mic, MH34C2B Speaker mic with lapel clip and earphone jack, NC28B Wall charger, NC34B Wall charger, NC65B Wall charger for NC18B/38B, PA6 DC adapter, YH2 VOX headset with mic

MULTI BAND HANDHELDS

FT-50RD/41B Ultra Compact Dual Band VHF/UHF HT High performance, heavy-duty, rugged, state-of-the-art and small enough to put in your pocket. Simple to operate, and has all the features you want. 5W output with standard battery • 4 power output levels • Transmit ranges: 144-148 MHz and 430-450MHz • Receive ranges: 76-200, 300-540, 590-999MHz (cell blocked), includes AM aircraft receive, FM narrow and FM wide • 3 selectable filters • Digital Code Squelch (DCS) • CTCSS encode/decode • 112 memory channels plus two home channels • High speed scanning • 48 character alphanumeric display • Auto Range Transponder System™ • Dual watch • Digital voice recorder • Transmit and receive battery savers • Automatic power off • Time-out timer • Windows™ PC programmable • Rear mount battery • MIL-STD 810D/E rating • 3.9" h x 2.25" w x 1.2" d, 11.5 oz..... **\$249.99**

Available Accessories

ADMS1E Software, CA14 Two charging sleeves, CA15 Charging stand for NC60B, CLIP10 Spring loaded belt clip, CN3 BNC-SMA adapter, CSCV10 Cordura case, CSC68 Case for unit with FNB41/FBA15, CSC69 Case for unit with FNB40, CT27 Cloning cable/CT27A, CT30 Mic Y adapter, EDC5B DC adapter/filter, EDC6 DC adapter; plug/wire only, FBA15 4 "AA" battery holder, FBA21 6 "AA" battery holder, FEP10 Earphone, FNBV47 7.2V 1100mA battery with belt clip, FNB40 6V 650mA battery, FNB41 9.6V 600mA 5W battery, FNB42 9.6V 1100mA 5W battery, FNB49 6V 600mA battery, LCC10C Leather case with clip for unit with FNB41/V47, LCC10S Leather case with sleeve for unit with FNB41/V47, LCC11S Leather case with sleeve for unit with FNB40, MH30C2B Speaker mic, MH34B4B Speaker mic, MH37A4B Earpiece and mic, NC50 One-hour dual slot charger, NC60B Wall charger, PA17 Battery cable extender, RH1 Black rubber protector, RH1R Orange rubber protector, VC25 VOX headset, YHA54 Replacement 2m/440 BNC duck

FREE ITEMS included with some radios.
See Price Guide for details.



tal coded squelch • Backlit keypad • Auto range transponder system • One-touch emergency system • PC programmable • 6-digit alphanumeric memory labels • 3.2" h x 1.9" w x 1" d, 4 oz..... **\$149.99**

Available Accessories

ADMS1E Windows software, CN3 BNC-SMA adapter, CSC71 Soft case, CT44 2-pin speaker mic adapter, EDC15 DC adapter, FBA20 Battery holder, FEP10 Earphone, FNB52LI 3.6V 700mA lithium-ion battery, MH34B4B Speaker mic, MH37A4B Earpiece and microphone, NC66B Two-hour charger, VC25 VOX headset



home channels • 10 auto-scan weather channels • CTCSS encode/decode, Digital Coded Squelch (DCS) • Backlit keypad • Auto range transponder system • 8 character alphanumeric display • Time-out timer • Dual watch • Dot matrix LCD • Smart search spectrum analyzer • Temperature display read-out • Barometric pressure sensor option • Automatic power-off • Windows PC programmable • 16-digit 9-memory DTMF autodialer • Busy channel lock out • Innovative multi-section antenna • Aluminum diecast case • MIL-STD 810 rating • 3.4" h x 2.3" w x 1.1" d, 8.9 oz..... **\$299.99**

Available Accessories

ADMS1E Windows software, CD15 Charger stand for NC72B, CN3 BNC-SMA adapter, CSC73 Soft case, CT27 Cloning cable, CT44 2-pin speaker mic adapter, EDC5B DC adapter/filter, EDC6 DC adapter; plug/wire only, FBA23 2 "AA" cell battery case, FNB58LI 7.2V 1100mA lithium-ion battery, MH34B4B Speaker mic, MH37A4B Earpiece and microphone, NC72B Extra wall charger, SU1 Altitude/barometric pressure sensor, VC25 VOX headset

VX-1R Ultra Compact Dual Band HT Provides superb local communications at power levels of 1W or 500mW. Impressive memory and scanning capabilities in addition to wideband receive which includes VHF and UHF TV audio. AM broadcast, FM broadcast, AM aircraft band, and public safety channels. • Receive ranges: 0.5-1.7MHz (BC Band) 76-108MHz (FM) • 108-137 (AIR) 137-170 (VHF HAM) • 170-222MHz (VHF TV) • 222-450MHz • 470-800 MHz (UHF TV) • 800-999MHz • Cellular blocked • Transmit ranges: 144-148MHz • 430-450MHz • 500 mW with standard 3.6V lithium-ion battery (1W at 6V DC) • 291 memory channels • Smart-Search™ • CTCSS encode/decode, digital coded squelch • Backlit keypad • Auto range transponder system • One-touch emergency system • PC programmable • 6-digit alphanumeric memory labels • 3.2" h x 1.9" w x 1" d, 4 oz..... **\$149.99**

VX-5R Tri-Band HT A miniature tri-band FM transceiver with extensive frequency coverage of 2M, 6M, 440MHz (including AM and FM broadcast bands), HF shortwave band up to 16MHz and the VHF AM aircraft band. Super thin profile and durable lightweight design. • 5W output (4.5W 430MHz) with standard lithium-ion battery • Transmit ranges: 50-54, 144-148 and 430-450 MHz, wideband receive: .5-15.995, 48-728.990 and 800-998.990MHz (cell blocked), includes AM aircraft, AM broadcast and FM broadcast • 220 memory channels plus

AMATEUR RADIO'S VALUE LEADER™



HF RADIOS

DX-70TH Compact HF Covers 160-6M • 150kHz-30MHz and 50-54MHz receive • SSB, CW, AM, FM • 100W (AM 40W) • Detachable face • 100 multi-function memories • Two VFOs • Easy split operation mode • Multi-function control • Narrow filter • Noise blanker • Speech processor • CTCSS for 10M and 6M repeaters • Full, semi or auto break-in CW • All mode squelch • General coverage receiver • Quick offset • Two scan modes • Separate antenna terminals for HF and 6M • RIT • TXIT • Selectable AGC • RF gain control • Dial lock • Automatic antenna tuner interface • MARS/CAP capability • 2 1/4" h x 7" w x 9" d, 8.3 lbs..... **\$749.99**

Available Accessories

DM330MVT 30 amp switching power supply with meter, DM340MVT 30 amp power supply with meters, EBC8 Front control head bracket, EBC9 Extra mobile bracket, EDS4 5' remote mount accessory cable kit, EDS5 15' mic extension cable, EDS6 15' remote cable, EDX1 Manual coax antenna tuner, EDX2 160-10M auto wire tuner, EMS14 Desk top microphone



DX-77T Covers 160-10M • 500kHz-30MHz general coverage receive • SSB/CW/AM/FM modes • 100W (AM 40W) • 100 multi-function memories • Two VFOs • Computer control via optional ERW-4 cable and software • Direct digital synthesis: eliminates the need for SSB narrow filter • Easy split operation mode • Multi-function control • CW narrow filters • Noise blanker • 6-50WPM electric keyer • Full, semi or auto break-in CW • All mode squelch • Quick offset • Two scan modes • RIT • High/low power setting control • Selectable AGC • RF gain control (RX) • Dial lock • Auto antenna tuner interface • Industry standard power input plug • MARS/CAP capability • Requires 13.8V DC @ 20A • 3.6" h x 9.5" w x 9" d, 8.3 lbs..... **\$699.99**

Available Accessories

DM330MVT 30 amp switching power supply with meter, DM340MVT 30 amp power supply with meters, EDS5 15' mic extension cable, EDX1 Manual coax antenna tuner, EDX2 160-10M auto wire tuner, EMS14 Desk top microphone, ERW4 PC cable

Used & Demo
Equipment lists

Updated regularly on the web.
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SINGLE BAND HANDHELDS

Manufacturer	ADI	ADI	ADI	ADI	ALINCO	ALINCO	ALINCO	ALINCO	ALINCO	ALINCO	ALINCO	ALINCO	ALINCO	CHEROKEE
Model	AT-201HP	PR-52	PR-222	DJ-180TH	DJ-195T	DJ-196T	DJ-496T	DJ-280TH	DJ-480T	DJ-S11T	DJ-S41T			
Band	2 meters	6 meters	220MHz	2 meters	2 meters	2 meters	440MHz	220MHz	440MHz	2 meters	440MHz			6 meters
Rx Range (MHz)	130-179	40-54	216-228	130-174	135-174	135-174	430-450	220-225	440-450	144-148	425-450			50-54
Aircraft Rx	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Power Output	5W	5W	5W	5W	5W	5W	5W	5W	2W	340mW	340mW	5W	5W	5W
Touch-Tone Pad	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
Tone Encode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tone Decode	Yes	Yes	Yes	Yes	Yes ⁽⁴⁾	Yes ⁽⁴⁾	Yes ⁽⁴⁾	No	No	No	No	No	No	No
Memories	40	40	40	1050 ⁽²⁾ /200 ⁽³⁾	40	40	40	1050 ⁽²⁾ /200 ⁽³⁾	10/50 ⁽²⁾ /200 ⁽³⁾	21	21	5	5	5
Alphanumeric	No	No	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No
Battery Type	Mi-Cad	Mi-Cad	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad	AA	AA	Ni-Cad	Ni-Cad	Ni-Cad
PC Programmable	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No
Antenna Conn	BNC	TNC ⁽¹⁾	BNC	BNC	BNC	BNC	BNC	BNC	BNC	Fixed ⁽⁷⁾	Fixed ⁽⁷⁾	BNC	BNC	BNC
Height (in.)	3.3	4.25	4.25	5.2	4.9	4.9	4.9	5.2	5.2	3.9	3.9	6.0	6.0	6.0
Width (in.)	2.2	2.0	2.0	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.5	2.5	2.5
Depth (in.)	1.2	0.75	0.75	1.3	1.6	1.6	1.6	1.3	1.3	1.1	1.1	1.3	1.3	1.3
Weight (oz.)	6.6	14.5	14.5	12.3	13.2	13.2	12.3	12.3	2.72	2.72	14	12.5	12.5	12.5
					Closeout				Special Order			Closeout	Closeout	Closeout

*Alkaline case included with AA Ni-Cads

- (1) TNC ant. jack commonly found on cell & commercial equip.
 - (2) With optional EI-14U
 - (3) With optional EI-15U
 - (4) Standard CTCSS plus DCS
 - (5) Telescoping non-removable ant. Comes w/wire receive ant.
 - (6) 75 with alphanumeric tags
 - (7) Folding ant. attached. 2m ant. - telescopic, 70cm - flex.
 - (8) Expandable to 136-174
 - (9) With external 13.8V
 - (10) 80 without Alphanumeric, 40 with Alphanumeric
 - (11) 80 memory channels per side
 - (12) 1W on 1.2 ghz
 - (13) Dual operation between Voice & Data
 - (14) 120 Alphanumeric
 - (15) 1W with wall cube or cigarette adapter
 - (16) 6-character alphanumeric through software
- radios are cell blocked**

FREE ITEMS included with some radios.
See Price Guide for details

MULTI-BAND HANDHEIDS

Manufacturer	ADI	ALINCO	ALINCO	ALINCO	ALINCO	ALINCO	ALINCO	ICOM	ICOM	ICOM	ICOM	KENWOOD	KENWOOD	KENWOOD	KENWOOD	FT-50RD/41B	YAESU	YAESU	YAESU
Model	AT-600HP	DJ-C5T	DJ-65TH	DJ-V5TH	DJ-V5TDCH	IC-Q7ABC	IC-T7H	IC-T81A	IC-W32A	TH-07A(G)	TH-G71A	TH-79AKSS	FT-50RD/41B	VX-1R	VX-5R				
Tx Range (MHz)	144-148 430-450	144-148 420-450	144-148 438-450	144-148 438-450	Same	144-148 440-450	144-148 440-450	50-54, 144-148 1240-1300	144-148 440-450	144-148 430-450	144-148 430-450	144-148 438-450	144-148 430-450	144-148 430-450	50-54 144-148 430-450				
Rx Range (MHz)	108-174 400-470 900-985	118-174 420-450	108-174 420-480	76-999	Same	30-1300	118-174 400-470	50-54, 74-174 400-470 1240-1300	118-174 400-470	118-174 400-480	118-174 400-470	118-174 438-450 ⁽¹⁾⁽³⁾	76-200 300-540 590-999	5-1.7 48-729 76-999	0.5-16				
Single/Multi Rx	Dual	Single	Dual	Single	Same specifications as the DJ-V5TH but has a clear, see-thru case to show off the internal components.	Single	Single	Single	Dual	Single ⁽³⁾	Single	Dual	Single	Single	Single				
Aircraft Rx	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Power Output	5W	300mW	5W	5W	5W	350mW	6W	5W ⁽²⁾	5W	5W	5W	5W	5W	500mW ⁽¹⁾⁽³⁾	5W				
Memories	200 ⁽¹⁾⁽⁴⁾	50	80/80 ⁽¹⁾⁽¹⁾	200	to show off the internal components.	200	70	124	200	200	200	82	112	291	220				
CTCSS	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec	Enc/Dec
TTP	Yes	No	Yes	Yes	Also includes a "AA" battery pack along with the standard Ni-Cad pack.	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes				
Alphanumeric	Yes	No	No	Yes		No	No	Yes ⁽¹⁾⁽⁴⁾	Yes	Yes	Yes	No	Yes	Yes	Yes				
PC Programmable	Yes	No	No	No		No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes				
Battery Type	Ni-Cad	Li-ion	Ni-Cad	Ni-Cad	the standard	Ni-Cad	Ni-Cad	Ni-MH	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad	Li-ion	SMA				
Ant Connector	BNC	Fixed	BNC	SMA		SMA	BNC	SMA	BNC	SMA	SMA	BNC	SMA	Li-ion	SMA				
Height (in.)	6.5	3.7	5.4	3.8		3.8	4.8	4.3	5.5	4.7	4.4	5.1	3.9	3.2	4.1				
Width (in.)	2	2.2	2.2	2.3		2.3	2.3	2.3	2.3	2.1	2.1	2.2	2.3	1.9	2.4				
Depth (in.)	1.5	0.4	1.1	1.3		1.1	1.1	1.2	1.4	1.7	1.3	1.1	1.2	1	1.3				
Weigh (oz.)	15.5	3.2	12.8	1.2		6.4	14.3	9.9	16	13.4	11.6	11.2	11	4	10				

ICOM®



HF RADIOS

IC-706 MK II-G Ultra Compact HF/VHF/UHF All Mode Transceiver Carries on the 706 series tradition of base station performance and features in a mobile rig-sized package. Frequency coverage is expanded to include the 70 cm band and power is increased for the 2 meter band. Plus, enhancements and added features and functions. • Covers 160–10M + 6M, 2M and 70cm • 0.03–200MHz broadband receive with wide AM and wide FM broadcast reception • Power output: 100W (40W AM) from 160–6M, 50W (40W AM) on 2M, 20W (8W AM) on 70cm • All mode including RTTY and PSK31 • AF speech compressor • 107 alphanumeric memories • Detachable control panel • 2 optional filter slots • AF-DSP • Tone encode • Tone squelch • Tone scan • Access to RIT/second VFO • Cross band split • Noise blanker • IF shift • Preamp/attenuator • CW keyer • CW pitch control/reverse • Full break-in (QSK) • Speech processor • VOX • Simple band scope function • Scroll menu system • SWR graphic sweep display • One-button duplex and auto repeater functions • Backlit keys • Large built-in speaker • 2 antenna connectors • Quiet cooling fan • Requires 13.8V DC @ 20A • 6.6" w x 2.3" h x 7.9" d, 5.5 lbs..... **\$1049.99**

706IIG/AH4 The 706MKIIG with an AH4 80-6M 120W auto wire antenna tuner..... **\$1339.98**

706IIG/AT180 The 706MKIIG with an AT180 HF+6M auto coax antenna tuner..... **\$1499.98**

Available Accessories

Same accessory list as the IC-706MKII (below) excluding the UT86. But, with the addition of: CR282 Stability crystal, MB72 Carry handle

Available Accessories

BE1706TUNECONT Better RF IC706 tune control, AH2B Bumper mount/whip, AH2BWHIPONLY Extra whip only for AH2B, AH4 80-6M 120W auto wire antenna tuner, AT180 HF+6M auto coax antenna tuner, CR282 Stability crystal, CT17 Level converter, FL100 500Hz 9MHz IF CW filter, FL101 250Hz 9MHz IF CW filter, FL103 2.8kHz 9MHz IF SSB filter, FL223 1.9kHz 9MHz IF SSB filter, FL232 350Hz 9MHz IF CW/RTTY filter, HM118T TTP microphone, MB62 Mounting bracket for main unit, MB63 Mounting bracket for control panel, MB65 Mounting base platform, MB72 Carrying handle, OPC025D DC cord, OPC478 PC cable, OPC581 11.5' separation cable, OPC587 16' separation cable, OPC589 8-pin mic jack adapter cable, OPC598 23' extension cable for AT180, OPC599 7+8-pin-13-pin adapter, OPC742 13-pin cable, PS85 Switching power supply, RMK706 Remote mounting kit, SM20 Stand mic for base station, SM6 Electret desk mic, SM8 2-connector desk mic/scan, SP7 Small external speaker, UT102 Voice synthesizer

Used & Demo

Equipment lists

Updated regularly on the web.
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IC-718 HF All Band Transceiver Advanced features and performance, yet easy to use. Its simplified operation is perfect for beginners or great as a back-up rig. • Covers 160–10M • Continuous receive coverage 0.03–30MHz • 100W output (40W AM) • Built-in USB, LSB, CW, RTTY (FSK) and AM • 101 memory channels • Variety of scanning functions • Front mounted loud speaker • IF shift • Microphone compressor • RF gain control • Noise blanker • RF attenuator and preamp • Automatic notch • Ample CW features include an electronic keyer • VOX • Flexible filter selection • Digital S/Rf meter • High frequency stability • Optional voice synthesizer and DSP capability • Hand mic included • Requires 13.8VDC @ 20A • 9.4" w x 3.75" h x 9.4" d, 8.5 lb **\$699.99**

Available Accessories

AH2B Bumper mount/whip, AH2BWHIPONLY Extra whip only for AH2B, AH4 80-6M 120W auto wire antenna tuner, AT180 HF+6M auto coax antenna tuner, CR338 High stability crystal, CT17 Level converter, FL222 1.9kHz 455kHz IF SSB filter, FL257 3.3kHz 455kHz IF SSB filter, FL52A 500Hz 455 kHz IF CW filter, FL53A 250Hz 455kHz IF CW filter, FL96 2.8 kHz 455kHz IF SSB filter, MB23 Carrying handle, MB5 Mobile mount, OPC478 PC cable, OPC598 23' extension cable for AT180, PS85 Switching power supply, SM20 Stand mic for base station, SM6 Electret desk mic, SM8 2-connector desk mic/scan, SP20 Speaker with audio filter, SP21 Speaker, SP7 Small external speaker, UT102 Voice synthesizer, UT106 DSP



IC-746 HF/VHF All Mode Transceiver With solar cycle 23 geared up, all hams will be able to take advantage of better HF propagation conditions, night and day! • Covers 160–10M + 6M + 2M • Continuous receive coverage 0.03–60MHz and 108–174 MHz • 100W output (40W AM) on all bands – 100% duty cycle • 100 memories • 10 "memo pad" memories • All modes including RTTY and PSK-31 • Built-in auto antenna tuner for HF/6M • 2 antenna connectors for HF/6M, one for 2M • IF-DSP noise reduction, auto notch and selectable audio peak filters • Noise blanker • Dot matrix LCD display • Spectrum scope • Twin passband tuning • Triple band stacking register • 2-step preamp • 3 optional filter slots • RF speech compressor • Tone squelch • Tone scan • VOX • SmartTune™ variable speed tuning • Auto repeater duplex setting • Quick split • CW pitch control • QSK • Memory keyer with 4 built-in memories • QSO serial number generator • Transmit audio monitor • Requires 13.8V DC @ 20A • Hand mic with up/down frequency control included • 11.3" w x 4.7" h x 12.5" d, 19.6 lbs **\$1349.99**

Available Accessories

AH2B Bumper mount/whip, AH4 80-6M 120W auto wire antenna tuner, CR282 Stability crystal, CT17 Level converter, FL100 500Hz 9MHz IF CW filter, FL101 250Hz 9MHz IF CW filter, FL103 2.8kHz 9MHz IF SSB filter, FL222 1.9kHz 455MHz IF SSB filter, FL223 1.9kHz 9MHz IF SSB filter, FL232 350Hz 9MHz IF CW/RTTY filter, FL257 3.3kHz 455kHz IF SSB filter, FL52A 500Hz 455kHz IF CW filter, FL53A 250Hz 455kHz IF CW filter, FL96 2.8kHz 455 kHz IF SSB filter, OPC478 PC cable, PS85 Switching power supply, RS746 Windows software, SM20 Stand mic for base station, SM6 Electret desk mic, SM8 2-connector desk mic/scan, SP21 Speaker, UT102 Voice synthesizer



IC-756PRO HF/50MHz All Mode Transceiver Newly designed, 32 bit floating point DSP digital IF filter with 41 selectable bandwidths, microphone equalizer, manual notch function, TFT 5" color LCD, digital twin passband tuning (PBT), all mode, including PSK31, and much more. • Covers HF and 50MHz amateur bands • Continuous receive 0.03–60MHz • 150W (AM 75W) • 101 memory channels • AGC loop management • Edge cutting IF filter • RF speech compressor • Twin peak audio filter • DPSN • RTTY demodulator • Digital noise reduction • CW wave form • Spectrum scope • Digital voice memories • Highly stable transmitter • Digital twin PBT • High performance memory keyer • Analog and digital meters • Set mode condition list • Complete CW features • Superior receive IMD • Dual watch • Memory pad • Triple band stacking register • Quick split function • Built-in antenna tuner • RIT and ΔTX Control for main and sub band • Dual antenna system • VOX • 2-level preamp and 3-level attenuator • Auto TS function • CI-V interface capability with optional CT-17 • Noise blanker • Scanning functions • CTCSS tone encoder built in • 13.3" w x 4.3" h x 11.2" d, 21 lbs..... **\$2899.99**

Available Accessories

AH2B Bumper mount/whip, AH4 80-6M 120W auto wire antenna tuner, CT17 Level converter, HM36 Scanning hand mic, OPC478 PC cable, PS85 Switching power supply, SM20 Stand mic for base station, SM6 Electret desk mic, SM8 2-connector desk mic/scan, SP20 Speaker with audio filter, SP21 Speaker, UT102 Voice synthesizer



IC-775DSP HF All Band Transceiver • Covers 160–10M • 100kHz–29.995MHz continuous receive • All mode, including PSK-31 • Data mode • Power MOS FET PA section • 200W output (50W AM); continuous duty cycle • Preamp and attenuator • Channelized quick split function • RF speech compressor • Triple band stacking register • Transmit and receive DSP • Digital noise reduction • Digital PSN • Noise blanker with adjustable level and width • Audio peak filter • Dual watch • Dual tuning knobs • Twin pass band tuning • Accommodates up to 11 filters, 6 filters installed, accepts up to 5 more • Built-in memory keyer • Electronic keyer function • CW pitch control • CW reverse • QSK • Double key jack • Large, easy-to-read amber display • PC programmable • Built-in heavy-duty power supply • Auto antenna tuner and selector • 16.7" w x 5.9" h x 15.4" d, 36.8 lb..... **Special \$3499.99**

Available Accessories

CR282 Stability crystal, CT17 Level converter, FL101 250Hz 9MHz IF CW filter, FL102 6kHz 9MHz IF AM filter, FL222 1.9kHz 455MHz IF SSB filter, FL223 1.9kHz 9MHz IF SSB filter, FL257 3.3kHz 455kHz IF SSB filter, FL53A 250Hz 455kHz IF CW filter, HM36 Scanning hand mic, MB19 Rack mounting handles, OPC478 PC cable, SM20 Stand mic for base station, SM6 Electret desk mic, SM8 2-connector desk mic/scan, SP20 Speaker with audio filter, SP21 Speaker

FREE ITEMS included with some radios.
See Price Guide for details.



ICOM®



IC-781 HF All Band Transceiver An Advanced HF transceiver with built-in CRT display. Works all bands on all modes. It's an amateur's dream rig – top of the line. • Covers 160–10M • Continuous receive 0.1–30MHz • All modes • 150W (AM 75W) • 100% duty cycle transmitter • 99 memory channels • Multi-function CRT display • Spectrum scope • 25 kHz, 50kHz, 100kHz pan adapter • Terminal monitor • High performance filters • Dual watch • Quad conversion receiver • Twin passband tuning • Band stacking register • Audio peak and notch filters • RIT • Noise blanker • Electronic keyer • Built-in clocks, timers & auto antenna tuner • PC programming capability • Built-in 120/240V power supply • 16.1" w x 6" h x 16.2" d, 50.7 lb **Special Order \$6999.99**

Available Accessories

CT17 Level converter, FL103 2.8kHz 9MHz IF SSB filter, OPC478 PC cable



DUAL BAND BASE STATION

IC-910H VHF/UHF All Model Transceiver The successor to the IC-821H, but when the optional 1200MHz is installed, it becomes an all mode (SSB, CW and FM) triband transceiver. • Coverage: 144–148, 430–450 and 1240–1300MHz (option) • Memory channels: 99 regular, 1 call, 6 scan edges for each band, 10 satellite • 5–100W (2m), 5–75W (440MHz), 1–10W (1200MHz) • Large, 3.5" multi-function LCD, 10-key direct entry keypad for operating frequency or memory channels • Satellite mode operation support • 9600bps packet • Simultaneously works 2 bands in receive and full duplex • CW full support • Versatile scanning functions (programmed, memory, mode select memory and tone scan) • Memory pad • 50 tone CTCSS encoder • On-touch repeater function • Auto repeater function • Speech compressor • IF shift • VOX • RIT • Optional DSP • PC compatible though optional level converter • Requires 13.8V DC @ 23A • 9.5" w x 3.6" h x 9.4" d, 10 lbs

This device has not been approved by the Federal Communications Commission. This device may not be sold or leased, or be offered for sale or lease, until approval of the FCC has been obtained.

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HF RADIOS

TS-50S HF Transceiver • Covers 160–10M • General coverage receive 500kHz–30MHz • 100W output SSB/CW and FM (AM 25W) • 100 memory channels • Multiple scan functions • Powerful menu system • Dual VFOs • Comprehensive interference reduction • Full & semi break-in • CW reverse mode • All-mode squelch • Switchable AGC • IF shift • 20 dB attenuator • Noise blanker • Multi-function hand mic • 7" w x 2.3" h x 9.1" d, 6.4 lbs. **Special \$699.99**

Available Accessories

AT50 HF external auto tuner, IF10D Computer interface, MB13 Quik release mobile mount, MC47 8-pin hand mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, PG2Y DC cable, PG4M 18' extension cable for the AT50, PS40 Switching power supply, PS53 Heavy-duty power supply, SO2 TCXO unit, SP23 Speaker, TC50 Travel case, YK107C 500Hz CW filter



TS-570D(G) HF Transceiver • Covers 160–10M • General coverage receive 500kHz–30MHz • Variable output: 5–100W SSB/CW/FM and FSK (AM 25W) • 100 memories with extensive functions • Large amber-colored backlit LCD display • 10-key direct entry • 46 EZ-to-use menu functions • Multiple scanning functions • 16-bit AF-stage DSP VOX • XIT/RIT • IF shift • Noise blanker • All mode squelch • TX audio shaping • Built-in electronic keyer • Full and semi break-in CW • CW message memory • CW auto tune • 38 tone CTCSS encoder and 1750Hz tone • TX audio shaping • Packet and FSK • PC control option • Two antenna ports and packet port • Built-in automatic antenna tuner • Requires 13.8V DC @ 20.5A • 10.6" w x 3.7" h x 10.6" d, 15 lbs..... **Special \$1099.99**

TS-570S(G) HF+6M Transceiver Features are the same as the TS-570D(G) (above) but covers 160–10M plus 6M. General coverage receiver range includes 50–54MHz **Special \$1299.99**

Available Accessories

DRU3A Digital recording unit, MB430 Mobile mounting bracket, MC43S 8-pin hand mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, MC90 2-head DSP desk mic, PG2Z DC cable, PS40 Switching power supply, PS53 Heavy-duty power supply, SO2 TCXO unit, SP23 Speaker, VS3 Voice synthesizer, YK88CN1 270Hz CW filter, YK88C1 500Hz CW filter, YK88SN1 1.8kHz SSB filter



TS-870S All Mode HF Transceiver • Covers 160–10M • General coverage receive 100kHz–30MHz • 100W output SSB/CW/FM/FSK (25W AM) • 100 memory channels • Multiple scanning modes • Menu function • Variable AGC • IF digital filter (DSP) • DSP detection • Dual mode noise reduction • Automatic notch filter • Voice equalizer • Speech processor • Transmit equalizer VOX • QSK digital IF filter • DSP noise reduction • IF stage auto-notch beat cancel function • Variable AGC circuit • Built-in electronic keyer • CW pitch control • CW reverse • Radio control software program • Auto antenna tuner on transmit and receive • Built-in antenna tuner dual antenna terminals • External receiver antenna output jack • EZ menu system CTCSS encoder • High quality digital recording option • RS-232C port • Requires 13.8V DC @ 20.5A • 13" w x 4" h x 13" d, 25 lbs..... **Special \$2099.99**

Available Accessories

DRU3A Digital recording unit, MC43S 8-pin hand mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, MC90 2-head DSP desk mic, PS40 Switching power supply, PS52 Heavy-duty power supply, SO2 TCXO unit, SP31 External speaker, VS2 Voice synthesizer

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TS-950SDX Top of the Line HF Transceiver • Covers 160–10M Ham bands • 100kHz–30MHz general coverage quad conversion receiver • MOSFET finals – 150W output SSB/CW/FSK/FM (AM 40W) • Digital display • Digital bar meter • 100 memories • Menu system • 10 direct band access keys • Remote function keypad • Digital Signal Processing (DSP) • Versatile scanning • All-mode data operation • Dual digital VFOs • Simultaneous dual frequency receive • Selectable IF filters with memory • Independent IF and AF circuits • 15 band pass filters • IF VBT and AF VBT • AF digital filter • IF notch filter • XIT/RIT • Full and semi break-in electronic memory keyer • Dual-mode noise blanker • SSB slope tuning • IF notch filter • CW reverse mode • CW pitch control • RF attenuator • Switchable AGC circuit • All mode squelch • Built-in automatic antenna tuner and 120/220/240V power supply • 15.8" w x 5.5" h x 15.75" d, 50.7 lbs **\$3999.99**

Available Accessories

DRU2 Digital recording unit, MC43S 8-pin hand mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, MC90 2-head DSP desk mic, SP950 Speaker with audio filters, VS2 Voice synthesizer, YK88CN1 270Hz CW filter, YK88SN1 1.8kHz SSB filter



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TS-520 1973

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TS-570DG - The Best Selling HF Radios, Then and Now!

Back in 1973, Kenwood introduced the first affordable HF radio to the world, the legendary TS-520. Today 27 years later, the Kenwood TS-570DG HF and the TS-570SG with 6 Meters are by far the most popular HF and HF+6 transceivers on the market. The truth is that Kenwood has built and sold more HF Amateur radios than any other RF product manufacturer...ever! In 27 years, there have been several advancements in Amateur radio: solid state circuits, digital displays for quicker and more accurate tuning, built-in tuner, and Digital Signal Processing (DSP) for cleaner signals unheard of with the TS-520. Ask any experienced Ham which HF radios have the best audio...the answer has always been Kenwood! Whether a CW contester, DX chaser, or a new upgraded General Class Amateur, Kenwood has an HF radio for you. Don't be fooled by big boxes, high price tags, complex operation, and broken promises of performance.

Time marches on and your friends at Kenwood continue to build outstanding products with unparalleled performance and great value. It's not too late to own an "HF Legend," because we are still building them today.



TS-50S Compact Mobile



TS-870S 100% Digital IF DSP

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TH-G71A / TM-G707A

If great value is what you are looking for in a new dual-band handheld or mobile, look no further. The Kenwood TH-G71A and TM-G707A have what you need. The moment you pick up the TH-G71A you will realize the tremendous quality it offers! The polycarbonate case, large one-piece heat sink, high quality antenna and connector, help make it exceed high MIL-SPECS for shock, dust and water. The large, easy to read and "understand" keypad, makes the TH-G71A the handheld of choice.

The TM-G707A mobile offers the highest quality also, with a one piece die-cast heat-sink, the world's smallest detachable front panel for difficult mounting situations and the largest, easy to read character display available anywhere. Of course each of these models offer built-in CTCSS en-code/de-code, 200 total memory frequencies on the 144/440 MHz bands, FREE PC programming software and complete operators manual over the internet. Oh, and let's not forget the best customer support in the industry to help both new and old Hams alike.

Experience *The G-Force*; because the "G" stands for *GREAT* value!

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TS-2000

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World's
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HF Backlit
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...The All New TS-2000 All Band/All Mode Transceiver Coming Soon!

Never before has an Amateur radio product provided such high performance and versatility. The **TS-2000** is in a class by itself and will no doubt become the most desired All band/All mode Amateur transceiver ever produced. With Amsat's Phase 3D soon on the horizon, Amateurs everywhere will be looking to the sky to experiment with this exciting breakthrough in our hobby. Kenwood's new **TS-2000** offers full functions on all HF bands as well as 6 meters. This is just the right equipment you'll need for making quick contacts. You'll discover it's dependable performance combined with easy operation will provide Ham operators a level of enjoyment impossible until now. VHF/UHF 144/440/1200 MHz operation is also available on the main band. Additionally, the sub-band offers 144/440 MHz operations for satellite TX/RX.

The **TS-2000** also offers the following features that you could be missing on your current All-band/All mode transceiver: True IF-Stage DPS with 100% digital filtering; built-in auto antenna tuner; the world's first HF backlit front key panel; 5 antenna ports; transverter ready; 9-pin db connector for easy PC interface; built-in TNC; DX packet cluster monitoring with direct go-to function for HF and 6 meter openings; CW auto-tune...to name just a few.

Not only does the **TS-2000** provide the most features and performance of any All band/All mode transceiver but it delivers exciting versatility by offering a traditional station radio or mobile head/no controls (black box) unit. It also can be operated by the ARCP computer control program to take control of most functions direct from your PC.

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P.O. Box 22745, Long Beach, CA 90801-5745, U.S.A.
Customer Support: (310) 639-5300 Fax: (310) 537-8235
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These devices have not been approved by the Federal Communications Commission. These devices are not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained.

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DYNAMIC DIGITAL DUO



Messaging

Location

TH-D7A(G) / TM-D700A

Throughout the years, Kenwood has engineered many significant feature and hardware advancements that earned us the nickname "Pacesetter in Amateur Radio". Kenwood continues to show this leadership in advanced design and technology with the TH-D7A(G) handheld and the TM-D700A mobile dual-banders. Not only do our radios perform all the functions of any other radio, but you can also explore the exciting digital world of APRS™, which has become the fastest growing and most dynamic part of the hobby. Most Disaster Communication organizations use APRS™. Identifying someone's location with APRS™ can save a life.

The TH-D7A(G) and the TM-D700A are the only radios ever produced that have both built-in TNC and APRS™ operating software, allowing you to send and receive exact GPS positions. You can even send text messages over 144.390 MHz, an international APRS™ frequency. Position reports and two-way messaging can also be achieved over the Internet, across the country or around the world. Street level mapping can also be employed using a PC, palm device or GPS. And yes, the TM-D700A is great for receiving satellite packet!

Venture into the future of Ham radio today and experience Kenwood's "Dynamic Digital Duo". They may just be the excitement and enjoyment you have been waiting for!

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SG-2020 COMPACT HF SSB/CW TRANSCEIVER

SGC 05-01
\$675⁹⁹

The ultimate "take-along" Portable!



Designed as a small, low power, low cost USB/LSB/CW HF companion for travel, where space is limited, or where only portable power is available.

Small, but fully microprocessor-controlled and loaded with "Big Rig" features. Take it and use it anywhere – fixed, mobile, portable, aviation or boating. Operating from 12V DC, it has the lowest current consumption on the market, drawing typically 430mA in receive & less than 3 amps at 20W CW output on transmit. Transmit power is adjustable from 0-20W PEP output & covers 1.8 to 29.7 MHz (U.S. Ham bands only). An RF speech processor utilizing VOGAD baseband processing & RF clipping provides plenty of DX "talk-power". The range of the General Coverage Receiver extends all the way from 400kHz to 29.7MHz for exciting worldwide reception of broadcast and shortwave stations. A back lit LCD display shows a 100Hz freq. resolution (10Hz overall res.). There are 20 Simplex or Semi-Duplex memories to store favorite operating frequencies.

Other functions and features include: SPLIT, RIT, XIT and tunable 100 to 2700Hz A.F. Bandpass. Also, a noise blanker, a fully adjustable (5 to 60 WPM) IAMBIC "B" mode keyer and convenient SWR metering and battery voltmeter. Dynamic hand microphone is included. "Smallest" portable rig, only 2.75"h x 5.9"w x 7"d, 4.4 lbs.

SG-2020 PortaPak



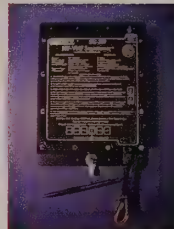
Special Order \$1195⁹⁹

Retrofit for existing radios only
available directly from SGC.

The SG-2020 PortaPak system is a self-contained HF SSB radiotelephone, ready for full portable operation (with the exception of the antenna). It is a sturdy compact package, well suited for all climactic conditions. The PortaPak includes the SG-2020 radio, a battery container which will hold 10 D cell batteries (not included) and a front panel cover for microphone storage. The Pak also includes an adjustable shoulder/hand strap. High quality, stainless steel latches provide reliable and secure connection of the battery pack and front panel cover. The Pak is 2.875"x 7"x 16.375" and weighs 11 lbs. w/batteries.

See Price Guide for selection of options and accessories for SGC Products

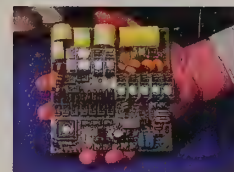
SG-237 Series



SGC 54-18
\$339⁹⁹



SGC 54-20
Special Order



SGC 54-19
Special Order

100W Microprocessor-Controlled HF Antenna Coupler

The SG-237 Smarttuner series is the world's smallest high performance antenna coupler for marine, aviation, commercial and amateur applications and any antenna type. The product is designed with high density surface mount components on a 4 layer PCB, providing high efficiency, reliability and performance. The standard version is fully waterproof, and the Porta PCB is mounted on a sturdy chassis plate which provides an excellent electrical and RF ground system. Rugged internal construction allows tough operation in any environment. • 54-18 standard version - Smallest finished antenna coupler on the market. • 54-20 Porta with whip (Special Order) - Can be handheld! Designed for quick mobile or base set up. • 54-19 PCB version (Special Order) - For retrofit or special projects.

- 1.8 to 60 MHz range • Power input range 3 to 100W PEP • Waterproof
- Weighs just 2 lbs. (PCB is 1.25 lbs.) • Antenna length: minimum 7 feet - 3.5 to 60 MHz, 23 feet - 1.8 to 60 MHz • Only 9L x 7W x 1.85H inches

SG-231 Smarttuner®



SGC 54-17 Smart, slim version of the intelligent Smarttuner™
\$529⁹⁹

- Complete frequency agility with no operator intervention
- Continuous coverage of 1 to 60MHz at 100W with almost any antenna
- Compact design, fits the most restrictive installations
- Weatherproof case allows mounting at antenna feed point for highest efficiency

Uses a microprocessor-controlled pi of L network to match virtually any load to your transceiver; with the SWR always 1:1.5 or better. Tuning solutions are stored in a non-volatile memory for fast (10ms) automatic recall! Operates with any HF or VHF transceiver, 3 to 100W, and requires only 12VDC and RF connections.

SG-2000 HF SINGLE SIDEBAND GLOBAL RADIO TELEPHONE

FULL FREQUENCY COMMUNICATIONS FOR VOICE AND DATA

Make contact anywhere with the power-packed SG-2000 – a rugged HF transceiver with 1.8 to 30MHz coverage and 150W PEP output. Engineered for simple and efficient operation, the SG-2000 features an alarm generator, upper/lower sideband, true amplitude modulated (AM) receiver and channel scan as standard features.

Talk anywhere in the world on the HF Ham bands, receive and send time sensitive documents, decode UPI transmissions, get latest weather reports or listen to shortwave broadcasts from around the world. Great for marine – highly stable & rugged.

Exceptional features include 644 factory programmed ITU voice and data frequencies plus 100 field programmable channels. Scan all ITU channels and up to 100 memory channels in adjustable scan speeds and rates. An extra large liquid crystal, wide angle display with adjustable backlighting provides easy viewing day or night.

Optionally, the SG-2000 can be fully computer controlled by any standard RS-232 protocol connector to allow easy flow and management of data communications on RTTY, ARQ (SITOR), FEC, Packet and telegraphy modes. Fast RX/TX switching time ensures easy and secure data transmissions.

The compact front panel of the SG-2000 can also act as the remote head terminal, and up to 8 full function remote heads can be utilized. The remote heads can be mounted flush with the bulkhead so they do not intrude on people space and the high-impact, abrasion and water resistant housing will stand up well in the toughest environments. The optional universal 5-way head mount orients the control head in any direction, for easy operation.



- Power Output: 150 watts PEP
- Transmitter frequency range: - 1.8 to 30 MHz
- Receiver frequency range: 500kHz to 30 MHz
- Modes: A3A, A3H, A3J and CW in LSB and USB, true AM in receive mode & data.
- Channels: 100 channels field programmable, 644 channels factory programmed ITU and data.
- Scan Channels: Up to 100 scan channels programmable in 10 groups
- Power Requirement: 13.6 VDC; 0.8A RX – 16A TX (voice)
- Size: 4 3/4" h x 10" w x 15" d • Weight: 12 lbs

See Price Guide for selection of options and accessories for SGC Products

PowerTalk™ Stunning HF-SSB Receive Clarity with SGC DSP



SGC 04-10 \$1849⁹⁹

With SGC's PowerTalk™ SG-2000, you'll intercept more weak HF signals, increase signal clarity and eliminate unwanted noise. You'll hear

SSB signals clearer and easier than ever before. A true HF-SSB Power Tool!

PowerTalk™ combines the advanced receiver technology of SGC's exclusive ADSP™ (Automatic Digital Signal Processing) and SNS™ (Signal Noise Subtraction). Fast audio and visual tuning – a DSP command center with a high performance spinner knob & bright LED indicators.

Includes all of the outstanding features of the SG-2000: 644 Ham and ITU discrete frequencies, programmable memory, large LCD display and 150 watts of power output.

SG-230 Smartuner®

SGC 54-14 \$489⁹⁹



200W Microprocessor Controlled Antenna Coupler for HF-SSB, AM, CW & DATA

You can't buy a smarter tuner. An automatic coupler so intelligent it precisely tunes any length antenna – 8 to 80 ft. in the HF band.

The Smartuner® automatically evaluates and switches 64 input & 32 output capacitance combinations, plus 256 inductance combos in a "pi" network.

The amazing result - it automatically selects from over a half-million different ways to ensure a perfect match for your transceiver.

The most intelligent feature is that the Smartuner remembers the chosen frequency and tuning values in less than 10 ms, each time you transmit on that frequency.

- 1.8–30 mhz range • 3–200 watts input • Tunes to 80 ft. antennas (all types)
- Microprocessor controlled • 10ms tuning time • Non-volatile memory
- Waterproof • 2"d x 10"w x 12"d



QMS

QUICK MOUNT SYSTEM

for any HF-SSB mobile

- *Low profile*
- *Efficient tuning for improved mobile performance*
- *Use on any vehicle*

Add a QMS to your HF SSB mobile system - an SGC Smartuner along with an efficient whip antenna - for increased radiation and efficiency. The QMS can be installed on any small or large vehicle (sportscar, SUV or sedan) without drilling any holes or damaging the car body. Installation can be permanent or temporary and just takes 15 minutes, using industrial strength straps, buckles and 4 suction cups. Mount the QMS on the vehicle side, trunk, roof or whatever location is convenient. Most QMS systems come with a lightweight mobile antenna (either Model SG-303 or SG-307) which provide a wide frequency range and easy tuning of the Smartuner.

The SG-307 antenna is 7 ft. and the SG-303 antenna is 9 ft. - both are dual resonant whips supplied with mounting hardware. The antennas are two section with an inner core of large stainless steel rod and a layer of fiber composite helically wrapped.

The QMS™ Quick Mount Systems come in the following packages (see Price Guide for pricing):

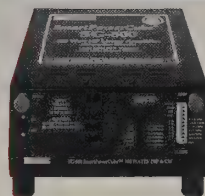
- 55-47 :** QMS Quick Mount System with SG-230 antenna coupler, SG-303 9 ft. antenna, strapping elements, 4 suction cups and mounting hardware. (150W 1.6-30MHz)
- 55-48 :** QMS Quick Mount System with SG-235 500W antenna coupler, SG-303 9 ft. antenna, strapping elements, 4 suction cups and mounting hardware. (500W 1.8-30MHz)
- 55-49 :** QMS Quick Mount System with SG-231 antenna coupler, SG-307 7 ft. antenna, strapping elements, 4 suction cups and mounting hardware. (100W 1-60MHz)
- 55-50 :** QMS Quick Mount System with SG-237 antenna coupler (100W 3.5-60MHz) (antenna not provided and any stainless steel whip can be used) **Special Order**

Description of the QMS

Basic Quick Universal Mount system case. Includes strapping elements and 4 suction cups to mount the SGC coupler and antenna on any vehicle. Antenna and coupler are not supplied.

See Price Guide for selection of options and accessories for SGC Products

BRAIN POWER



Smart PowerCube

SGC 52-96
\$1169⁹⁹

Microprocessor Controlled Linear Amplifier for 1.8 to 24 MHz

The SG-500 SmartPowerCube produces tremendous power—nearly as much as a 1000W amplifier, but it requires less than one cubic foot of space.

Electronic brain power makes this possible. The SG-500 is an intelligent, microprocessor-controlled high power linear amplifier, designed with high efficiency transistors. Its electronic brain constantly monitors your HF-SSB's activities, power needs, and antenna condition, and automatically—in less than 15 milliseconds—selects the right broadband filter.

Designed to perform reliably and essentially unattended, in the most demanding conditions. For maximum power—intelligent power—at low cost, the Smart Power Cube is just the amplifier for you.

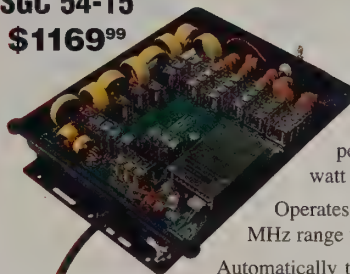
- Covers: 1.8 to 24 MHz • Power Output: SSB: 500W PEP; CW: 500W for 10 minutes, no fan; 500W unlimited with fan; AM: 250W carrier maximum • Automatic bandswitching • Protection: Input over-drive, over current, over temperature • Size: 6" x 12 1/4" d x 11 1/4" w



SG-235 Smartuner®

SGC 54-15
\$1169⁹⁹

500W Microprocessor-Controlled HF Antenna Coupler



SmartTuning—now you can achieve perfect coupling to your HF rig at the 500 watt power level.

Operates with any HF transceiver from 1.8 to 30 MHz range with 3 to 500 watts output power.

Automatically tunes any length antenna from just 23 ft. long without preliminary tuning or adjustments.

The built-in microprocessor evaluates and switches 64 input and 32 output capacitance combinations plus 256 inductance combinations in a "pi" network (over a half-million possible combinations). The chosen frequency and tuning values are remembered allowing reselection of those values in less than 10 ms, each time you select that frequency. Flexibility is a key feature with its attractive options, including 24V DC.

- Microprocessor controlled • 1.8 to 30 MHz range • 3-500w input • Tunes from 23 ft. antenna at full power • Non-volatile memory • 10-mS retuning Time • Waterproof • 16d" x 12"w x 3"h inches



LOW POWER SINGLE BAND SSB TRANSCEIVERS

Easy to operate Travel Radio™! No microprocessor – just turn on and tune in. • 20W PEP* – plus Constant Current™ syllabic speech processing for an added 4–6dB advantage to cut through noise, fading, and QRM. Includes a handheld dynamic microphone that complements the speech processing. *Less on VHF models. • Low drain – 3A from 12V supply or battery. • Low noise preamp and active double balanced mixer front end • Excellent selectivity – Sharp 2.3 kHz SSB crystal ladder filter reduces passband noise, fights QRM, and improves intelligibility • TVI protection (built-in 7 element lowpass filter) • Real S-meter: Position your beam with accuracy and give meaningful reports. Also, monitor speech processing level. • Agile tuning – reduction drive analog VFO lets you scan the band for signals quickly, then zero in smoothly • Amplifier jack • Compact 2½" x 6½" w x 6"d • 3 models below

9420X 20M SSB (14.150–14.350MHz) **\$229.99**

9440X 40M SSB (7.150–7.3MHz) **\$229.99**

9475X 75M SSB (3.75–4.00MHz) **\$229.99**

Available Accessories:

415B CW adapter (9420X and 9440X only), 971 200W HF tuner, 4110 Portable AC power supply, 4114 Rechargeable power pack



QRP SINGLE BAND CW TRANSCEIVERS

Easy operation! Sets up in seconds. • 5W CW • Great sensitivity – hot superhet receiver with super-quiet FET post amp stage in the IF filter • Excellent selectivity – tight CW bandwidth crystal ladder filter fights unwanted QRM and noise • Smooth and stable VFO (wide-spaced reduction drive VFO capacitor) • True RIT • Recovery AGC • Built-in 3" speaker • Low power drain – 50mA on receive and 1.2A peak on transmit • Semi-QSK – set adjustable hold transmit/receive switching to suit your normal sending speed or set for full QSK during contests • Compact • 5 models below

9015 5W, 15M (21.000–21.200MHz) **\$169.99**

9017 5W, 17M (18.068–18.11MHz) C/O **\$129.99**

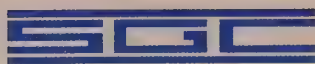
9020 5W, 20M (14.000–14.075MHz) **\$169.99**

9030 5W, 30M (10.100–10.150MHz) **\$169.99**

9040 5W, 40M (7.000–7.150MHz) **\$169.99**

Available Accessories:

27 Handle for CW station, 412 Plug-in Curtis keyer, 726 Plug-in audio filter, 971 200W portable antenna tuner/meter, 1770 Portable 15M dipole, 1771 Portable 17M dipole, 1772 Portable 20M dipole, 1773 Portable 30M dipole, 1774 Portable 40M dipole, 4110 portable AC power supply, 4114 Rechargeable power pack



HF SSB TRANSCEIVERS

SG-2000 (04-01) HF SSB Global Radio Telephone with full frequency coverage for Voice and Data Talk anywhere in the world on the HF Ham bands, receive and send time sensitive documents, decode UPI transmissions, get latest weather reports or listen to shortwave broadcasts. Also, great for marine use. Optionally, it can be fully computer controlled via the standard RS-232 protocol connector. The front panel can also be used as a remote head terminal, and up to 8 full function remote heads can be utilized. • 1.8–30MHz transmit • 500kHz–30MHz general coverage receive • 150W • Modes: A3A, A3H, A3J and CW in LSB/USB, true AM in receive mode and data • 100 field-programmable and 644 factory programmed ITU & data channels • Up to 100 programmable scan channels in 10 groups • 13.6 VDC @ 16A • 4½" h x 10" w x 15" d, 12 lbs **\$1599.99**

Available Accessories:

0411 Standard remote head/bracket/20' cable, 0412 Remote kit/swivel bracket/cable, 0413 Remote kit/5-way mount/cable, 0414 Remote kit/suction cup mount/cable, 0415 Remote mobile head (memory channels only), 0422 Powertalk remote head, 5182 Fan kit for continuous transmit, 5231 Waterproof MIL handset, 5232 Carbon telephone handset, 5234 RS232 interface, 5247 Shock/MIL mounting tray, 5251 CA-1 HV feed wire, 5252 CA-2 RG-58 coax, 5253 CA-230 antenna coupler cable, 5254 CA-2000 remote head cable, 5261 PSC/12-1 12' power supply cable/1 plug, 5262 PSC/12-2 12' power supply cable/2 plugs, 5304 PS-30 30/40A peak unregulated power supply, 5305 PS-50 50/70A peak unregulated power supply



PowerTalk™ SG-2000 (04-10) HF SSB Transceiver With the PowerTalk™ SG-2000, you'll intercept more weak HF signals, increase signal clarity and eliminate unwanted noise. You'll hear SSB signals clearer and easier than ever before. Combines SGC's exclusive ADSP™ (Automatic Digital Signal Processing) and SNS™ (Signal Noise Subtraction). A DSP command center with a high performance spinner knob and bright LED indicators. Includes all of the outstanding features of the SG-2000: 644 Ham and ITU discrete frequencies • 150W • Programmable memory • Large LCD display **\$1849.99**

Available Accessories:

0412 Remote kit/swivel bracket/cable, 0413 Remote kit/5-way mount/cable, 0414 Remote kit/suction cup mount/cable, 0422 Powertalk remote head, 5231 Waterproof MIL handset, 5232 Carbon telephone handset, 5234 RS232 interface, 5247 Shock/MIL mounting tray, 5251 CA-1 HV feed wire, 5252 CA-2 RG-58 coax, 5253 CA-230 antenna coupler cable, 5254 CA-2000 remote head cable, 5261 PSC/12-1 12' power supply cable/1 plug, 5262 PSC/12-2 12' power supply cable/2 plugs, 5304 PS-30 30/40A peak unregulated power supply, 5305 PS-50 50/70A peak unregulated power supply



SG-2020 (05-01) Compact HF SSB/CW Transceiver Small, but fully microprocessor-controlled and loaded with "Big Rig" features. Take it and use it anywhere – fixed, mobile, portable, aviation or boating. Operating from 12V DC, it has the lowest current consumption on the market. • 1.8–29.7MHz amateur bands • 400kHz–29.7MHz general coverage receive • SSB/CW modes • 0–20W PEP output, adjustable • 40 memories • Backlit LCD display • Built-in IAMBIC "B" mode electronic keyer • Noise blanker • RF speech processor and clipping • SWR metering and voltage indicator • SPLIT, RIT, XIT • AF bandpass tuning • Handheld dynamic microphone included • Requires 13.8V DC @ 3A • 2½" h x 6" w x 7½" d, 4½ lbs **\$675.99**

FREE ITEMS included with some radios.

See Price Guide for details.



HF TRANSCEIVERS

FT-100 Ultra-Compact HF/VHF/UHF All Mode Transceiver Widely acclaimed for outstanding performance and flexibility. Wide frequency coverage and versatile – a great compact mobile, vacation or expedition radio. Covers 160–6M, 144–148 MHz, 430–450MHz • General coverage receive: 100kHz–30MHz, 30–970MHz (cell blocked) • 100W output on HF/6M; 50W on 2M; 20W on 430MHz • DSP system enhances signal-to-noise ratio via sophisticated bandpass, noise reduction and automatic notch filters • Dual VFOs • Electronic keyer built-in • 200 memories and Quick Memory Bank (QMB) • Smart Search™ auto memory channel loading • Bright LCD with multi-function display • VOX • Requires 13.8V DC @ 22A • 6.3" w x 2.1" h x 8" d **Closeout \$899.99**

FT-100D Same features as the FT-100 above, but also includes: • Improved high-quality speaker • 500 Hz, 8-pole crystal filter (CW) • High stability reference oscillator • CTCSS decoder. **Special \$1199.99**

Available Accessories:

ATAS100 HF/6M/2M/430MHz motorized antenna, ATBK100 ATAS100 base kit/use with mount, CT39 Packet cable, CT58 Band data cable, CT62 CAT interface cable, FC20 Automatic antenna tuner, FP1023 23A switching power supply with fan, FP1030A 25A power supply with meters, FTS27 CTCSS decoder (comes standard on FT-100D), LLS Phone patch unit, MLS100 Mobile speaker, MMB62 Remote control panel bracket, MMB67 Quick release bracket, SP6 External speaker, SP7 External speaker, TCX08 High stability reference oscillator (comes standard on FT-100D), T9021925 Extra DC cord, XF117A 6kHz AM filter, XF117C 500Hz CW filter (comes standard on FT-100D), XF117CN 300Hz CW filter, YH77ST Stereo headphone, YSK100 Separation kit





FT-600 Compact HF Transceiver Straightforward, sensible layout of a commercial radio with the most often used features on the front panel. It excels as an easy-to-use base or mobile. • Direct Digital Synthesis (DDS) • Covers 160–10M with 50 kHz–30MHz general coverage receiver • 100W output (25W AM) • 100 memory channels (in 4 banks of 25) • Direct keypad frequency entry • Alpha-numeric display • Noise blanker • Omni-Glow™ display • High output front mounted speaker • Dual watch MIL-STD 810 rating • Requires 13.8V DC @ 20A • 9.6" w x 4.1" h x 11.2" d, 9.9 lbs **Special Order \$899.99**

Available Accessories:

FC800 Extra long wire auto tuner, MMB20 Mobile mount



FT-817 HF/VHF/UHF Backpack Transceiver A self-contained, battery-powered, low power, amateur transceiver for camping, mountain topping, portability. • Transmit: 160–10M, 50MHz, 144MHz, 430–450MHz, plus Alaska Emergency Channel (5167.5 kHz) • Receive: 100kHz–56MHz, 76–154MHz, 420–470MHz • AM aircraft receive • 200 memories, plus home channels and band-limit (PMS) • Alpha-numeric labeling • SmartSearch™ auto memory loading system • Power Output: 5W SSB/CW/FM with 13.8V external DC, 1.5W AM, 2.5W SSB/CW/FM with 9.6V Ni-Cd Pack or 8 "AA" batteries, 0.7W AM, up to 5W SSB/CW/FM power programmable via menu on Ni-Cad or AA cells. • Operating Modes: USB, LSB, CW, AM, FM, W-FM, Digital (AFSK), Packet (1200/9600 FM) • Digital Modes: RTTY, PSK31-U, PSK31-L, and User defined USB/LSB (SSTV, Pactor, etc.) • Two-color LCD multi-function display (blue/amber) • Bar-graph meters power output, ALC, SWR, modulation • RF gain/squelch control • Built-in noise blanker • Attenuator • Dual VFOs, split capability, IF shift, and RIT • Built-in CW electronic keyer and semi-break-in • VOX • Automatic repeater shift • Built-in CTCSS and DCS • Auto-Range Transponder System • Spectrum scope • Front/rear panel antenna connectors • Rear panel data, accessory and key jacks • Auto power-off and TX time-out timer • CAT system computer control capability (4800/9600/38400 bps) • 5.31" w x 1.5" h x 6.5" d, 2.6 lbs **TBA**



FT-840 Compact High Performance HF Transceiver Blending high performance digital synthesis techniques, convenience and affordability from previously successful radios, the FT-840 adds a choice of two optional remote automatic antenna tuners and a wealth of convenient functions. • Direct Digital Synthesis (DDS) • Covers 160–10M with 50kHz–30 MHz general coverage receiver • 100W output (25W AM) • 100 memory channels • Low noise FET front end • Two direct digital synthesizers (DDSS) and magnetic rotary encoder for smooth tuning • Twin band-stacking VFOs • IF shift • Reverse CW • FM repeater operation with automatic 10M repeater offset • Selectable CTCSS • Requires 13.8V DC @ 20A • 9.2" w x 3.6" h x 9.5" d, 9.9 lbs **Special \$649.99**

Available Accessories:

FC10 Extra coax fed auto tuner, FC800 Extra long wire auto tuner, FIF232C RS-232 interface, FM747 FM unit, FP1023 23A switching power supply with fan, FP1030A 25A power supply with meters, MD100A8X Desk mic with tone control, MLS100 Mobile speaker, MMB20 Mobile mount, SP6 External speaker, SP7 External speaker, TCX04 TCXO unit, YF112A 6kHz AM filter, YF112C 500Hz CW filter, YH77ST Stereo headphone

FREE ITEMS included with some radios.
See Price Guide for details.



FT-847 HF/VHF/UHF All Mode Transceiver All mode operation on HF, 50MHz, 144MHz, and 430MHz with full satellite capability • Covers 160–6M, 2M, 70cm and 5.1675MHz (Alaska emergency channel) • General coverage receive: 100kHz–30MHz, 36–76MHz, 108–74MHz, 420–512 MHz • 100W output on HF/6M (25W AM); 50W (12.5W AM) on 2M/430MHz • High resolution 0.1Hz tuning steps • ShuttleJog™ tuning ring • Direct frequency keypad entry • Low noise VHF/UHF preamps built-in • Advanced DSP system enhances signal-to-noise ratio via sophisticated bandpass, noise reduction and automatic notch filters • Cross band full duplex operation • Normal/reverse tracking and dedicated satellite memories • 1200/9600 bps packet ready • CW sidetone/pitch control • Built-in CTCSS/DCS encode/decode • Four antenna jacks on rear panel • Requires 13.8V DC @ 22A • 10.2" w x 3.4" h x 10.6" d, 14.4 lbs **Special \$1499.99**

Available Accessories:

ATAS100 HF/6M/2M/430MHz motorized antenna, ATBK100 ATAS100 base kit, CT61 Amp interface cable, FC20 Automatic antenna tuner, FP1023 23A switching power supply with fan, FP1030A 25A power supply with meters, FVS1A Voice synthesizer, LL7 Phone patch unit for SP8, MD100A8X Desk mic with tone control, MH36D8 DTMF mobile microphone, MMB66 Mobile mounting bracket, SP8 External speaker with filters, YF115C 500Hz CW/Collins Mechanical filter, YF115S02 2.5kHz SSB/Collins Mechanical filter, YH77ST Stereo headphone



FT-920 HF + 50MHz All Mode Transceiver Direct digital frequency synthesis • Covers 160–6M with 100kHz–30MHz, 48–56MHz general receive • Power output adjustable up to 100W (25W AM) • Multifunction tuning dials and keyboard frequency entry • 127 memories with alphanumeric labels • Multiple scanning functions • Dual watch system • Quick memory bank (QMB) instant memory system • Built-in high-speed antenna tuner, digital voice recorder and electronic memory keyer • DSP speech processor, auto notch filter, noise reduction and VOX control • CW spot and pitch controls IF shift • QSK and built-in electronic keyer • Noise blanker • Dual antenna jack plus receive-only antenna jack • ShuttleJog™ control • Independent RX preamps for high and low bands • OmniGlow™ LCD with twin frequency displays • RS-232 computer control interface • Requires 13.8VDC @ 22A • 15.2" w x 5.3" h x 12.5" d, 24 lbs **Special \$1339.99**

Available Accessories:

FM1 FM unit, FP1023 23A switching power supply with fan, FP1030A 25A power supply with meters, LL7 Phone patch unit for SP8, MD100A8X Desk mic with tone control, SP8 External speaker with filters, TCX07 TCXO unit, YF116A 6kHz AM filter, YF116C 500Hz CW filter, YH77ST Stereo headphone



FT-1000MP 100W HF All-Mode Transceiver Features Enhanced Digital Signal Processing (EDSP). An outstanding receiver section (featuring Collins Mechanical Filters), a clean and versatile transmitter, plus outstanding ergonomics. Ideal for the Digital modes with 3 special filters. • Direct digital frequency synthesis • Covers 160–10M with 100kHz–30 MHz general coverage receive • Adjustable, up to 100W power output (AM 25W) • Shuttle-Jog™ tuning knob • Dual in-band receive with separate S-meters • AM synchronous tuning • EDSP Functions: IF demodulating and processing, noise reduction, control selections, RX audio equalization, TX modulation and equalization, bandpass filtering, automatic multiple auto notch filter • Cascaded RF/IF filtering • Dual noise blankers • Expanded tuning scale • Multi-color high-resolution display • Quick split • Built-in electronic keyer • CW spot-pitch-reverse • CW tuning indicator • 2 main antenna jacks • RS-232 computer interface • Built-in 110/220V AC switching power supply or 13.8VDC @ 9A • 16.4" w x 5.4" d x 13.9" d, 33 lbs **Closeout \$2399.99**

Available Accessories:

DVS2 Voice recording module, FH1 Remote control keypad, LL7 Phone patch unit for SP8, MD100A8X Desk mic with tone control, MH31B8 Extra hand mic, SP8 External speaker with filters, TCX04 TCXO unit, TCX06 Deluxe TCXO unit, YF110CN 250Hz CW filter/XFE, YF110SN 2kHz SSB filter/XFD, YF114CN 250Hz CW second IF main receive, YF114SN 2kHz SSB second IF main receive, YF115C 500Hz CW/Collins Mechanical filter, YH77ST Stereo headphone



We accept I.M.P.A.C.® Government Credit Cards

Used & Demo
Equipment lists

Updated regularly on the web.
Check them out and order **On-line**



FT-1000D 200W HF All-Mode Transceiver Judged "best overall" by top DX'ers worldwide, the FT-1000D delivers optimum receiver performance and real "muscle" on transmit. With a front panel featuring two flywheel weighted tuning knobs and two large displays, it's a perfect blend of ergonomics and electronics. Hear signals you've never heard before.

- Direct Digital Synthesis (DDS) • Covers 160–10 meters with 100kHz–30MHz general coverage receive • 100 memory channels store frequency, mode, and filter selection • Up to 200W power output (AM 50W) • True cross-band dual receive (dual receiver front ends and IFs), two large tuning knobs • Front panel receive antenna switch for beverage or loop antenna • Built-in antenna tuner with 32 memories • CW spot and two CW key jacks for maximum convenience • CAT system for computer control • Built-in 110/220VAC power supply • 5.9" h x 16.4" w x 14.8" d, 31lbs. **Special \$3799.99**

Available Accessories:

DVS2 Voice recording module, FIF232C RS-232 interface, LL5 Phone patch unit, MD100A8X Desk mic with tone control, SP5 External speaker, XF455MC 600Hz CW filter, YF110CN 250Hz CW filter/XF5, YH77ST Stereo headphone



FT-1000MP MK V 200W HF All Mode Transceiver Represents the crowning achievement in Yaesu's HF transceiver design history. A unique blend of analog and digital technology, the MARK-V is based on the concept of rigorous filtering in all stages of the receiver and transceiver. Introduces all-new features to the FT-1000 series. • IDBT (Interlocked Digital Bandwidth Tracking), which matches the receiver passbands of the 8.2 MHz IF, 455kHz IF and DSP systems • VRF (Variable RF Front-end Filter), providing a high-Q "Preselector" system protecting the receiver's front end. • 200W MOSFET Final Amplifier, conservatively rated with revolutionary heat sink design • 75W optional Class-A PA operation, providing extraordinary SSB signal purity • Integrated ShuttleJog™ control, combines the access buttons for IDBT and VRF with the convenient frequency control of Yaesu's exclusive ShuttleJog™. • High-speed automatic antenna tuner, beefed up for operation at the 200W level • Separate included switching power supply, provides 30V for the MOSFET PA transistors, as well as 13.8V for the other circuitry. • 16.4" w x 5.4" h x 13.9" d, 31 lbs. (xcvr), 4.2" w x 5.4" h x 13.6" d, 13 lbs. (power supply) **\$3399.99**

Available Accessories:

DVS2 Voice recording module, FH1 Remote control keypad, LL7 Phone patch unit for SP8, MD100A8X Desk mic with tone control, MH31B8 Extra hand mic, SP8 External speaker with filters, TCX06 Deluxe TCXO unit, YF110CN 250Hz CW filter/XF5, YF110SN 2kHz SSB filter/XFD, YF114CN 250Hz CW second IF main receive, YF114SN 2kHz SSB second IF main receive, YF115C 500Hz CW/Collins Mechanical filter, YH77ST Stereo headphone



SINGLE BAND MOBILE RADIOS

The most advanced mobiles ever! The AR-147+, AR-247 and AR-447 include all of the features that one would expect to find on a modern amateur mobile transceiver including AM air receive (AR-147+ only), direct frequency entry, lots of memory channels (81) and more. Both CTCSS and Digital Coded Squelch to ensure compatibility with all repeater systems.

- MARS/CAP capable • 80 Multi-function memories plus call channel • CTCSS and DCS encode/decode • Auto repeater offset • 9 DTMF autodialer memories + redialer • Programmable band and memory scan modes • Time-out timer • DTMF paging • Dual frequency watch • Direct frequency entry using multi-function DTMF microphone • PC programming capability • Auto power off • Frequency or channel display modes • 4-step display dimmer

AR-147+ 2M Mobile Transmit: 144–148MHz • Receive: 118–171MHz • Three power settings (60, 10, 5W) • 1½" x 5½" x 6¼", 2.7lbs. **\$169.99**

AR-247 220MHz Mobile Transmit: 222–225MHz • Receive: 216–229MHz • Three power settings (30, 10, 5W) • 1½" x 5½" x 6¼", 2.7lbs. **\$249.99**

AR-447 70 Centimeter Mobile Transmit: 430–450MHz • Receive: 420–460MHz • 3 power settings (35, 10, 5W) • 1½" x 5½" x 6¼", 2.7lbs. **\$259.99**

Available Accessories:

PROG47 PC programming software and cable, PREMMC100 Premier sun visor mobile mic system, PREPCAKVHF Premier cable/8-pin



SINGLE BAND MOBILES

DR-150TQ Channel Scope™ 2M FM Mobile with UHF Receive 144–147.995MHz tx; 108–173.995 MHz (AM airband receive) and 440–449MHz rx • 50W/25/5W • Two VFOs • Cross band repeat and full duplex modes Direct frequency entry and remote control via the supplied DTMF microphone • Channel scope monitors up to 7 frequencies simultaneously • 100 memory channels • Three scan modes • DTMF paging • CTCSS tone encoder • Time out timer • DSQ selective call • 9600bps connector • Auto-dialer • Auto-dial memory • S-meter squelch • Over the air cloning function • 13.8V DC @ 10A • 5.58" w x 1.57" h x 5.1" d, 1.7lbs. **\$229.99**

Available Accessories:

CC150 Cloning cable, EMS14 Desk top microphone



DR-135TP 2M Mobile/Base Voice and Data Transceiver 144–148MHz tx; 118–135.995MHz (AM aircraft) and 136–173.995MHz rx • 50W/10/5W • Wide or narrow FM modes • Internal 1200/9600 bps TNC for Packet and APRS® • 100 multi-function memory channels with alphanumeric labels plus 1 call channel • Super-wide 7 character, 3 mode alphanumeric display • CTCSS and DCS encode/decode plus 4 European tone bursts • Backlit DTMF microphone • 10 autodialer memories • Multiple scan modes • Front panel GPS input for APRS® • Rear panel DSUB9 computer connection • Ignition Key on/off feature – stays in selected mode • Cable clone capability • Theft alarm feature • 13.8V DC @ 11A • 5.58" w x 1.57" h x 6.83" d, 2.3lbs **Special \$299.99**

DR-135T Same, but no TNC **Special \$199.99**

Available Accessories:

EDC37 DC cable, EDC43 Cigarette lighter cable, EJ41U 1200/9600 TNC (for DR-135T only)



DR-M06TH 6 meter FM Transceiver Covers 50–54 MHz • FM, selectable 20/1W output • 100 memories plus CALL channel • 50 tone CTCSS encoder • Programmable repeater offset for each memory channel • Time-out timer • 13.8V DC @ 3A • 5.5" w x 1.5" h x 4.5" d, 1.6 lbs • Includes DTMF hand microphone **\$249.99**

DR-M03SX 10 meter FM Transceiver Same as the DR-M06TH without TTP microphone • Covers 28–29.7 MHz • Selectable 10/1W output. **\$164.99**

Available Accessories:

EMS12A TTP microphone (for DR-M03SX only)



DUAL BAND MOBILES

DR-605TQ 144/430MHz FM Dual Band Mobile 144–147.995MHz and 430–449.995MHz tx; 136–173.995MHz and 420–470MHz rx • 50W/10/5W (VHF), 35/10/5W (UHF) • 50 memory channels plus 1 call channel per band • Cross band repeat and full duplex modes • Direct frequency entry via the supplied DTMF mic • Dual VHF/UHF only displays • Multi scan functions • CTCSS encode, 3 European tone bursts • Twin volume controls • Packet compatible • Cable cloning function • Internal antenna duplexer • MARS/CAP capability • 13.8V DC @ 11.5A • 5.58" w x 1.57" h x 6.8" d, 2.4lbs. **\$339.99**

Available Accessories:

EDS8 EMS14 to DR605 adapter, EMS14 Desk top mic

HIF-RADIOS

Manufacturer	ALINCO	ALINCO	ICOM	ICOM	ICOM	ICOM	ICOM	ICOM	ICOM	ICOM	ICOM	KENWOOD	KENWOOD	KENWOOD	KENWOOD	MFJ	MFJ
Model	DX-70TH	DX-77T	IC-706MkIIIG	IC-718	IC-746	IC-756PRO	IC-775DSP	IC-781	TS-50S	TS-570D(G)	TS-575(G)	TS-870S	TS-95SDX	9015	9017		
Bands	HF, 6M	HF	HF, 6M, 2M, 70CM	HF	HF, 6M, 2M	HF, 6M	HF	HF	HF	HF	HF, 6M	HF	HF	15M	17M		
Rx Range (MHz)	15-30, 50-54	5-30	03-200, 400-470	03-30	03-200	03-60	01-30	1-30	5-30	5-30, 6M	5-30, 6M	1-30	1-30	21-21.2	18.068-18.11		
Power (SSB/CW/FM)	100W HF/6M	10-100W	5-100 HF/6M 5-50 2M 2-20 70CM	5-100W ⁽¹⁾	5-100 HF/6M/2M	5-100	5-200W	150W	100W	5-100W	5-100W HF/6M	100W	20-150W	5W CW	5W CW		
Power (AM)	40W HF/6M	4-40W	2-40W HF/6M 2-20W 2M 2-8W 70CM	2-40W	5-40W H/6M/2M	5-40	5-50W	75W	5-40W	5-25W	5-25W	25W	10-40W	No	No		
DSP	No	No	Yes	Optional	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No		
Tuner	No	No	Optional	Optional	Internal	Internal	Internal	Internal	No	Yes	Yes	Yes	Yes	No	No		
Keyer	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No		
Speech Readout	No	No	Optional	Optional	Optional	Optional	Optional	Optional	No	Optional	Optional	Optional	Optional	No	No		
VOX	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No		
Power Requirements	12VDC, 20A	12VDC, 20A	12VDC, 20A	12VDC, 20A	12VDC, 20A	12VDC, 23A	125VAC	125VAC	12VDC, 20.5A	12VDC, 20.5A	12VDC, 20.5A	12VDC	125VAC	12VDC 1.2A	12VDC 1.2A		
Antenna ports	2 ⁽¹⁾	1	2 ⁽¹⁾	1	3 ⁽¹⁾	2	2	1	1	2	2	2	1	1	1		
Computer Port	No	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	RS-232	RS-232	RS-232	Optional	No	No		
Height (in.)	2.3	3.7	2.3	3.75	4.7	18.3	5.9	5.9	2.4	3.8	3.8	4.8	6	2.5	2.5		
Width (in.)	7	9.8	6.6	9.44	11.3	4.3	16.7	16.1	7.1	10.6	10.6	13	16.1	6.5	6.5		
Depth (in.)	9	9	7.9	9.40	12.5	11.2	15.4	15.2	9.2	10.7	10.7	13.1	17.6	6	6		
Weight (lbs.)	6	8.4	5.5	8.4	19.5	21	36.8	50.7	6.4	15	15	25.4	50.6	2	2		Closeout

Manufacturer	MFJ 9020	MFJ 9030	MFJ 9040	MFJ 9420X	MFJ 9440X	MFJ 9475X	SGC 04-01 SG-2000	SGC 04-10 POWER TALK	SGC 05-01 SG-2020	YAESU FT-100* & FT-100D	YAESU FT-600	YAESU FT-817	YAESU FT-840	YAESU FT-847	YAESU FT-920	YAESU FT-1000MP	YAESU FT-1000MPKV	YAESU FT-1000D
Model																		
Bands	20M	30M	40M	20M	40M	75M	HF	HF	HF	HF, 6M 2M, 70CM	HF	HF, 6M 2M, 70CM	HF	HF, 6M 2M, 70CM	HF, 6M 2M, 70CM	HF	HF	HF
Rx Range (MHz)	14-14.075	10.1-10.15	7-7.15	14.15-14.35	7.15-7.3	3.75-4	5-30	5-30	1.8-29.7	1-961 ^(B)	5-30	1-56 76-154 420-470	1-30	1-30 108-174 420-512	1-30 48-56	1-30	1-30	1-30
Power (SSB/CW/FM)	5W CW	5W CW	5W CW	12W SSB	12W SSB	12W SSB	150W SSB/CW	150W SSB/CW	0-20W SSB/CW	100W HF/6M 50W 2M 20W 70CM	100W SSB/CW	5W	100W ⁽²⁾	5-100W HF/6M 50W 2M/70CM	10-100W ⁽²⁾	100W	200W	20-200W
Power (AM)	No	No	No	No	No	No	40W	40W	No	25W HF/6M 20W 2M 12.5W 70CM	25W	1.5W	25W	25W HF/6M 12.5W 2M 12.5W 70CM	2.5-25W	25W	50W	50W
DSP	No	No	No	No	No	No	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
Tuner	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes
Keyer	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Speech Readout	No	No	No	No	No	No	No	No	No	No	No	No	No	Optional	No	No	No	No
VOX	No	No	No	No	No	No	No	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes
Power Requirements	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 30A	12VDC 30A	12VDC 5A	12VDC 22A	12VDC 22A	12VDC 2A	12VDC 22A	12VDC 22A	12VDC 22A	125VAC	FP29 30V (supplied)	125VAC
Antenna ports	1	1	1	1	1	1	1	1	1	2 ⁽³⁾	1	2	1	4 ⁽³⁾	2	2	2	1
Computer Port	No	No	No	No	No	No	Optional	Optional	Optional	Optional	Yes	2	Optional	RS-232	Optional	Optional	Yes	Optional
Height (in.)	2.5	2.5	2.5	2.5	2.5	2.5	4.6	4.6	2.75	2.2	4.2	1.5	3.7	3.4	5.3	5.4	5.4	5.9
Width (in.)	6.5	6.5	6.5	6.5	6.5	6.5	10	10	6	6.3	9.7	5.3	9.4	10.2	16.1	16.4	16.4	16.4
Depth (in.)	6	6	6	6	6	6	15	15	7.25	11.5	8	9.6	9.6	10.6	12.4	13.9	13.9	14.8
Weight (lbs.)	2	2	2	2	2	2	12	12	2.5	6.6	9.9	2.6	12	14.4	30.8	33	31	51

FREE ITEMS included with some radios.
See Price Guide for details.

(5) Port per band. HF/6M can be combined
(6) Cell blocked
(7) No FM

- 1) One port for HF; one port for 6M
- 2) Optional board required for FM
- 3) HF/6M one port, 2M/440MHz second port
- 4) Two ports for HF, one dedicated for 2M

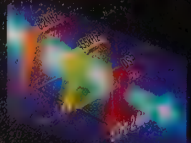


"Brick-Wall" Selectivity

Today's elite-class operators demand the best RF weaponry available. Yaesu's exciting new MARK-V FT-1000MP answers the call, with an expanded array of receiver filtering, 200 Watts of power output, and Class-A SSB operation capability for the cleanest signal on the band. Enhanced front-panel ergonomics save you seconds in a pile-up or a contest "run," and Yaesu's HF design and manufacturing know-how ensures that no short-cuts have been taken in our effort to bring you the best HF transceiver money can buy. For more QSOs in your log, and more awards on your wall, there is only one choice: the MARK-V FT-1000MP from Yaesu!

I. IDBT: Interlocked Digital Bandwidth Tracking System

The IDBT feature greatly simplifies operation by matching the bandwidth of the DSP (Digital Signal Processing) system to the net bandwidth of the 8.2 MHz and 455 kHz IF stages. The IDBT system accounts for the settings of the IF WIDTH and SHIFT controls, and automatically sets a DSP bandwidth which matches the analog IF bandwidth.



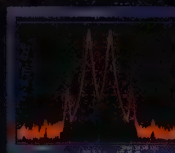
IDBT: A Breakthrough in Selectivity

II. VRF: Variable RF Front-End Filter

Protecting the MARK-V's receiver components from strong out-of-band signals, the VRF system acts as a high-Q "Preselector," located between the antenna and the main bandpass filter networks, providing additional RF selectivity on the 160-20 meter Amateur bands for multi-operator contest teams, DX-peditions, or for operation near MW/SW broadcast stations.

III. 200 Watts of Transmitter Power Output

Utilizing two Philips® BLF147 Power MOSFETs in a 30-Volt, push-pull configuration, the MARK-V's transmitter puts out up to 200 Watts of clean output power, thanks to the conservative design of the PA section.



Class A 75 W PEP IMD

IV. Class-A SSB Operation

Exclusively available on the MARK-V FT-1000MP, a press of a front-panel button engages Class-A SSB operation of the transmitter, at a power output level of 75 Watts. Class-A operation produces incredibly clean signal quality, with 3rd-order IMD suppressed 50 dB or more, and 5th- and higher-order products typically cleaned down 80 dB or more!

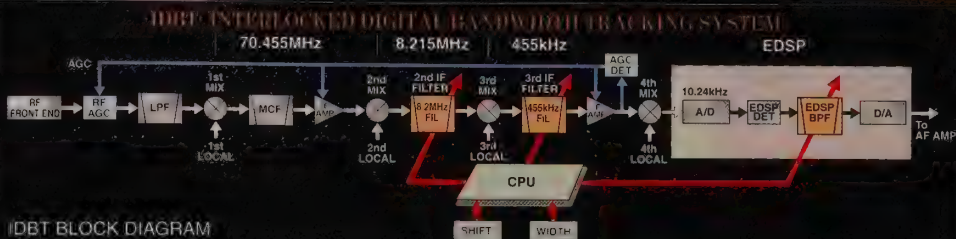
V. Multi-Function Shuttle Jog Tuning/Control Ring

The immensely-popular Shuttle Jog tuning ring, which is concentric with the Main Tuning Knob, has a new look in the MARK-V: it now includes the activation switches for the VRF (left side) and IDBT (right side) features, so you don't have to move your hand position to activate these important circuits during contest or pile-up situations!



HF 200 W All-Mode Transceiver

MARK-V FT-1000MP



YAESU
Choice of the World's top DX'ers

For the latest news, hottest products:
Visit us on the Internet! <http://www.yaesu.com>

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Cerritos, CA 90703. (562) 404-2700

Specifications subject to change without notice. Specifications guaranteed only within Amateur bands. Some accessories and/or options are standard in certain areas. Check with your local Yaesu dealer for specific details.

MOBILE DX MASTER

Since its introduction over a year ago, Yaesu's FT-100 HF/VHF/UHF Transceiver has been widely acclaimed for its outstanding performance and flexibility. Now the FT-100D builds on this success story, adding the convenience of factory-installed modules for today's Ham on the go!

FT-100D HIGHLIGHTS

The FT-100D is a high-performance, ultra-compact transceiver operating on the 160-10 meter HF bands, plus the 50, 144, and 430 MHz VHF/UHF bands. Known for its outstanding receiver performance, the FT-100D's easy-to-access DSP system is the cornerstone of the outstanding receiver capability. Providing Noise Reduction, Auto-Notch, and Narrow-Bandwidth Filter selection, the DSP system also includes a Microphone Equalizer for the transmit side.

The new and enlarged speaker of the FT-100D ($\phi 66$ mm) provides spectacularly clean audio output, to help you dig out those weak signals.

Whether at home or away, the fantastic new FT-100D is The Choice of the World's Top DX'ers. Step up to the FT-100D, and enjoy the thrill of the sunspot peak in style!

MICRO MOBILE

FT-100D

Ultra-Compact HF/VHF/UHF Transceiver

YAESU
Choice of the World's Top DX'ers

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Raising The Standard for Toughness

Solid As A Rock



Actual Size



Yaesu's FT-1500M represents a technological breakthrough in radio transceiver design! New advances in power amplifier technology combine to provide you with 50 Watts of clean transmit power with enhanced current consumption efficiency. Yaesu's patent pending aluminum die-cast shell construction dissipates heat throughout the entire transceiver chassis and eliminates the need for a cooling fan. This allows the FT-1500 to fit in an incredibly small case size: less than 5 inches square X 1.4 inches high and offer superior operating specifications as well!

FT-1500M

50 W 2-m FM Mobile Transceiver

YAESU
Choice of the World's top DX'ers™

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For the latest news, hottest products:
Visit us on the Internet! <http://www.yaesu.com>



VX-150
Compact yet incredibly rugged 2-meter handheld is designed to perform under the most difficult operating conditions. And it's packed with the leading-edge features you've come to expect from a Yaesu product. Five Watt power-output, 209 memories, DCS/CTCSS, 7 digit alphanumeric display, automatic repeater shift and much more.



FT-50RD/41B
This durable, multi-featured 5 Watt Dual Bander is manufactured to rigid MIL-810 standards. Featuring wideband frequency coverage,* CTCSS/DCS operation, Dual Watch, 112 memory channels, and Digital Voice Storage.



FT23RMKII/FT33R
These ultra-compact, 5 Watt VHF FM Handhelds feature rugged die-cast aluminum cases, 10 memory channels, optional CTCSS, and multiple scan modes. The FT23RMKII (2M) and the FT-33R (222 MHz) are easy to operate, and give outstanding performance.



VX-110 SPECIAL ORDER
This incredibly rugged 5 Watt VHF handheld features 209 memories, Smart Search™, DCS/CTCSS, simple 8 key operation and Omni Glow™ display illumination for night time operation.



VX-1R
The pocket-sized VX-1R is small in size only. Featuring Smart Search™, DCS/CTCSS, Dual Watch, ARTS™, wide-band coverage (76-999* MHz plus AM BC). The VX-1R provides 291 memory channels, and puts out 1/2 Watt (1 Watt w/optional E-DC-15 DC Adapter).

* Cellular Blocked



FT411MKII/12
The affordable FT411MKII is compact and durable. This 5 Watt VHF FM Handheld features a die-cast case, 40 memory channels, 10 DTMF memories, built-in VOX, and multiple scan modes.



VR-500
This miniature Handheld Receiver provides FM, AM, SSB and CW reception on 100 kHz-1300 MHz, with 1091 memory channels, Smart Search™, versatile Dot Matrix display, Band Scope, and Dual Watch.

VX-5R

Although Yaesu's newest Tri-Band Handheld Transceiver is the world's smallest, it offers the performance of a full-size unit. The VX-5R operates on the 50 MHz, 144 MHz and 430 MHz bands with 5 Watts of power output, along with ultra-wide receive coverage of the VHF and UHF spectrum, plus AM medium- and short-wave broadcast reception. The VX-5R is military rated, so its durable, lightweight design allows you to take it anywhere.

It is equally suited to walking through the concrete jungle as it is to forging the raging rivers of a real one. Along with a temperature display, the optional barometer pressure sensor unit gives a read-out of barometric pressure and altitude.



TOUGH GUYS.

When you're small, you get picked on. Isn't that how it goes? Well not in Yaesu territory, because not only do we design compact handhelds for efficiency, but we give these clever little guys plenty of muscle. Yaesu handheld transceivers have earned the bragging rights for being the smallest handhelds with the most durable water resistant casings ever created. And packed inside the brawn are engineering accomplishments in performance that are unmatched in the industry. Our high-tech handheld transceivers provide clean power output on the VHF and UHF bands and offer revolutionary features that allows these tough guys to continually outperform the competition. Learn more about Yaesu products on the web at www.yaesu.com

YAESU...leading the way.

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AMATEUR RADIO'S VALUE



DR-610TQ Full-featured 144/430MHz FM Dual Band Mobile Transceiver with Channel Scope™ 144-147.995MHz and 438-449.995MHz tx; 108-173.995MHz (AM airband receive) and 420-470MHz rx • Full duplex between VHF and UHF bands • 50W/10/5W (VHF), 35/10/5W (UHF) • Two VFOs for each band • Direct frequency entry and remote control via the supplied DTMF mic • Channel scope™ monitors up to 7 frequencies simultaneously • 120 memory channels (expandable to 240) • Multiple scan functions • DTMF paging • CTCSS encoder • Time out timer • DSQ selective call • 1200/9600bps packet compatible • Auto-dialer • S-meter squelch • Over the air cloning function • Internal antenna duplexer • Detachable face for remote operation • Auto power off • 13.8V DC @ 11.5A • 5.58" w x 1.57" h x 6.3" d, 2.4lbs..... **\$439.99**

Available Accessories:

EBC8 Front control head bracket, EDS1 Junction box, EDS2 9' extension cable, EDS3 15' extension cable, EDS5 15' microphone extension cable, EJ23U 200 channel memory unit, EMS14 Desk top microphone



SINGLE BAND MOBILE

IC-2100H 2 Meter Rugged Transceiver Icom's newest and best performer against IMD. Straight-forward, easy-to-use operation • 55/10/5W • 144-148MHz transmit • 136-174MHz receive • One-touch button operation (no function key used) • 113 memory channels • Cool dual display: selectable green or amber backlit display • Large, easy-to-see, user-programmable, alphanumeric display • 4 back-lighting levels • Backlit DTMF microphone with 2 user-programmable keys • Heavy duty, one-piece, die cast aluminum chassis • Adjustable attenuator • CTCSS tone encode and decode • Built-in (program up to 50 tones) • Tone scan built-in • Auto repeater with busy lockout • Priority watch (3 types) • Wireless remote control microphone (optional) • PC cloning software (optional) • Mounting bracket included • Built to MIL STD 810 C/D/E for shock and vibration • Requires 13.8V DC @ 12A • 5.5" w x 1.6" h x 7.1" d, 2 lb, 10 oz..... **\$179.99**

Available Accessories:

BC96 Microphone holder, CSW2100 Windows software and cable, CS2100 DOS cloning software, EX1513 Infrared receive range extend, EX1759 Infrared receiver, HM90A Wireless microphone, HS62 Flexible mobile mic, MB17A Quick release bracket, OPC347 23' DC power cable, OPC440 16.4' mic extension cable, OPC441 Speaker extension cable, OPC474 Radio-to-radio cloning cable, OPC478 PC cable, OPC589 8-pin mic jack adapter cable, OPC647 8.2' mic extension cable



DUAL BAND MOBILES

IC-207H 2M/440MHz Super Compact Dual Bander • 45W (VHF), 35W (UHF) • Transmit 144-148MHz and 440-450MHz • VHF wideband receive: 118-174MHz (includes Air Band) • 162 memory channels • Works one band at a time. Switch between bands with a touch of the large blue button • 9600 baud packet ready • CTCSS encode and decode • Auto repeater function • Multi-function backlit remote control microphone • Optional wireless microphone • 4 power settings per band • Big dials; big keys; big, bright display - easy-to-use on the GO! • Cloneable with optional software and cable • 5.5" w x 1.6" h x 8.4" d, 3.1 lbs..... **\$299.99**

Available Accessories:

BC96 Microphone holder, CSW207/2710 Windows software, CS207 DOS programming software, EX1513 Infrared receive range extend, EX1759 Infrared receiver, HM90A Wireless microphone, HS62 Flexible mobile mic, MB17A Quick release bracket, MB58 Remote controller bracket, OPC347 23' DC power cable, OPC440 16.4' mic extension cable, OPC441 Speaker extension cable, OPC589 8-pin mic jack adapter cable, OPC600 11.5' separation kit, OPC601 23' separation kit, OPC646 Programming cable, OPC647 8.2' mic extension cable, RMX3 MB58/OPC600/OPC647 package



IC-2800H VHF/UHF Dual Band FM Transceiver New, Top-of-the-Line, Advanced 2 Meter/440 MHz MHz Mobile Dual Bander. Unique LCD has user-selectable display modes and video capabilities. • 50W (VHF), 35W (UHF) • Transmit: 144-148MHz and 430-450MHz • VHF wideband receive: 118-174MHz • 232 memory channels • 3" multi-function TFT color LCD (480 x 234 pixels) • NTSC video port - display SSTV, CCD camera input, video input, and more • Four unique display modes to suit personal preference • Separate control head with connection cable and two mounting brackets • Independent tuning controls • Simple bandscope function • 9600 bps packet terminal • CTCSS encoder/decoder • Crossband full duplex capability • Built-in duplexer • Selectable squelch attenuator & delay • Remote control capability • Built-in auto repeater • Time-out timer • Auto power off • PC programmable • Full function, backlit mic • Optional wireless infrared microphone • Requires 13.8V DC @ 12A • 5.5" w x 2.75" h x 1.3" d, 10.2 oz. (control head); 5.5" w x 1.6" h x 6.6" d, 2 lb, 9 oz. (main unit) **Special \$539.99**

Available Accessories:

CS2800 Windows cloning software, EX1513 Infrared receive range extend, EX1759 Infrared receiver, HM90A Wireless microphone, MB17A Quick release bracket, MB65 Mounting base platform, MB73 Controller bracket, OPC346 9.8' DC power cable, OPC347 23' DC power cable, OPC440 16.4' mic extension cable, OPC478 PC cable, OPC589 8-pin mic jack adapter cable, OPC647 8.2' mic extension cable, OPC872 Controller extension cable, SP10 Slim-line external speaker, UT49 DTMF decoder

FREE ITEMS included with some radios.
See Price Guide for details.

KENWOOD



SINGLE BAND FM MOBILE TRANSCEIVERS

Fully loaded with features and built to demanding MIL-STD specifications. Supremely user-friendly. • High RF output • 61 multi-function memory channels plus 1 call channel • Memory Name (MN) function with 6-digit alphanumeric display • DTSS selective calling • Multi-scan capability • Dual menu system • Multi-function microphone with backlit keys • DTMF memory function • Built-in CTCSS tone encoder (optional decoder) • Tone scan • Wireless cloning function • Repeater reverse switch • Lock function • Busy channel lock out • Auto power-off • Time-out timer • 13.8V DC @ <11A • 5.5" w x 1.5" h x 6.3" d, 2.2 lbs.

TM-261A 2M (pictured) 144-148MHz transmit; 118-174MHz receive • AM Airband receive • 50/10/5W • Auto repeater offset **Special \$179.99**

TM-461A 440MHz 438-450MHz transmit; 400-470 MHz receive • 35/10/5W • Looks similar to TM-261A except for frequency display **\$439.99**

Available Accessories:

TSU8 CTCSS decoder



TM-331A 220MHz FM Mobile Transceiver Rugged and compact with features that guarantee reliable performance. Covers 222-225MHz transmit and receive • 25/10/5W • Easy-to-read illuminated keys plus large LCD display • 20 multi-function memory channels plus call channel • Multi-scan capability • Tone alert with elapsed time indicator • Page function • CTCSS tone encoder • Time-out timer • Lock function • Auto repeater offset • Repeater reverse switch • Multi-function mic supplied • 13.8V DC @ 6.5A • 5.5" w x 1.5" h x 6.3" d, 2.5 lbs..... **\$499.99**

Available Accessories:

KQT8 CTCSS decoder

Look For This

NEW

& Check Out AES' Latest Additions.



TM-541A 1200MHz FM Mobile Transceiver
Extremely compact and lightweight, perfect for mobile installation. Enhanced night-time operation with its illuminated keys, large LCD, and backlit microphone with DTMF. Covers 1240-1300MHz transmit and receive • 10W RF power output • Easy-to-read, easy to operate illuminated keys plus large LCD display • 20 multi-function memory channels plus call channel • Built-in CTCSS tone encoder • ALT (Automatic Lock Tuning) • Tone alert system with elapsed time indicator • DTSS (Dual Tone Squelch System) • Pager function • Auto-power off • Time-out timer • Multi-scan function • Programmable call • Programmable VFO • Offset and repeater reverse switches • Multi-function backlit DTMF microphone supplied • 13.8V DC @ <6A • 5.5" w x 1.5" h x 6.3" d, 2.4 lbs **\$449.99**

Available Accessories:

DTU2 Digital paging unit, KQT8 CTCSS decoder



TM-G707A 144/440MHz FM Dual Bander
Extraordinarily user-friendly with its extra-large detachable control panel. Transmit ranges: 144-148 MHz and 430-450MHz; receive: 118-174 and 410-524MHz • 50/10/5W (VHF); 35/10/5W (UHF) • Detachable control panel with high-visibility amber-colored LCD display • 180 multi-function memory channels with alpha-numeric ID • Multi-scan functions • Priority scan function • Built-in CCTSS encoder and decoder • 1200/9600bps packet ready • Cross band repeater access • Selectable frequency step • S-meter squelch • Time-out timer • Dimmer control • Auto power-off • Multi-function backlit microphone with DTMF • 13.8VDC @ 11A • 5.5" w x 1.5" h x 7.4" d, 2.7 lbs..... **Special \$329.99**

Available Accessories:

DFK3C 9' cable kit, DFK4C 13' cable kit, DFK7C Deluxe 23' remote kit, MJ88 Modular/8-pin adapter, MJ89 Modular mic switch, PG4S PC interface cable, PG5A Packet data cable, VS3 Voice synthesizer



High performance multi-banders that can receive three bands simultaneously (with the addition of an optional band unit). Available detachable front panel kit and wireless remote control functions (by external DTMF signal) add versatility. Triple receive function with triple display • Selectable frequency step • Built-in DTSS selective calling with page • 101 memories and memory bank system • Flexible scan and scan stop modes • Tone alert system with elapsed time indicator • Triple repeater functions • S-meter squelch • Separate antenna and speaker terminals, squelch and volume control per band • Automatic band change • Sub-band muting • Date/time display, stopwatch, alarm • On/Off timer • Time-out timer • Auto power-off • 13.8V DC @ <11A • 5.9" w x 1.5" h x 6.8" d, 3.3 lbs.

TM-642AD 2M/220MHz (pictured) 144-148MHz transmit/118-174MHz receive and 222-225MHz transmit/215-235MHz receive • 50/10W (2m); 25/10W (220MHz) **\$739.99**

TM-742AD 2M/440MHz 144-148MHz tx/118-174MHz rx and 438-450MHz tx/410-438MHz rx • 50/10W (2m); 35/10W (440MHz) • Looks like TM-642AD except frequency display .. **Special \$639.99**

Available Accessories:

DFK3 9' separation display cable kit, DFK4 13' remote cable kit, DFK7 Deluxe 22' remote kit, MJ88 Modular/8-pin adapter, MJ89 Modular mic switch, TSU7 CTCSS decoder unit, UT1200 10W 1.2GHz unit, UT220S 25W 220MHz unit, UT440S 35W 440MHz unit, UT50S 50W 6M unit

FREE ITEMS included with some radios.
See Price Guide for details.



DUAL BAND UHF/VHF MOBILES

TM-D700A Data Communicator 144/440MHz Dual Bander Fully equipped to complement SSTV, GPS and APRS® operations. 144-148MHz and 430-450MHz transmit • Wide-band receive: 118-148, 136-175, 300-524 and 800-1300MHz (cell blocked) • 50/10/5W (VHF); 35/10/5W (UHF) • Detachable control panel with extra-large backlit LCD and multi-function key display • Backlit microphone with alpha-numeric input • Easy-to-use menu system • Ad-anced APRS-99 features • Built-in 1200/9600 bps TNC (AX.25) • DX cluster monitoring • Dual receive on same band for voice and data • 200 memory channels with 8-character alphanumerics • 2 call channels • 10 programmable memory scan banks • Built-in CTCSS and 1750 tone burst • Digital Code Squelch (DCS) • DTMF memory • Cross band and fixed band repeater operation • DCS code scan, tone, CTCSS scan • 10-channel program scan • Visual band scope • 13.8VDC @ 11.5A • 5.5" w x 2.4" h x 1.2" d, 0.4 lbs. (control), 5.5" w x 1.2" h x 7" d, 2.6 lbs. (main) **Special \$599.99**

Available Accessories:

MJ88 Modular/8-pin adapter, MJ89 Modular mic switch, PG4X 13' extension cable kit, PG5A Packet data cable, VS3 Voice synthesizer



TM-V7A 144/440 MHz FM Dual Bander Easy-to-operate control panel with dual mode cool-blue reversible LCD, offering both positive and negative display modes. Use with a PC, GPS, packet TNC or operate APRS position reporting and message system locally or nationally. Transmit: 144-148, 430-450MHz; receive: 118-174, 410-470MHz • 50/10/5W (VHF); 35/10/5W (UHF) • Data connector and separate automatic digital channel for APRS® • Detachable control panel • Dual receive on same band • Up to 280 multi-function memory channels (180 with 7-character alphanumerics) • Multi-scan functions • DTSS selective calling with page function • Built-in CTCSS enc/decoder • 1200/9600bps packet ready • Friendly operating menu • Automatic band change • Selectable frequency steps • S-meter squelch • Time-out timer • Audible frequency ID • Auto repeater offset (144MHz) • Auto power-off • Backlit multi-function mic with DTMF • 13.8VDC @ 10A • 5.5" w x 1.5" h x 7.4" d, 2.7 lbs **Special \$439.99**

Available Accessories:

DFK3C 9' cable kit, DFK4C 13' cable kit, DFK7C Deluxe 23' remote kit, MJ88 Modular/8-pin adapter, MJ89 Modular mic switch, PG4S PC interface cable, PG5A Packet data cable, VS3 Voice synthesizer

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at **www.aesham.com**

MFJ MFJ ENTERPRISES, INC.



VHF DATA RADIOS

Don't tie up your expensive rig on a single packet channel, check out these low-cost MFJ Data Radios.

8621 PacketOnly™ 2m Transceiver Compatible with all TNCs with hardware DCDs and most TNCs with software DCDs • 1200/9600 baud • 5W output • Low current drain (15mA on receive and less than 1 amp on transmit) • 5" w x 5" d x 1.5" h • Crystals installed for 145.01MHz **\$119.99**

8621X2 PacketOnly™ 2m Transceiver Ready to use for APRS. • Crystalled and aligned for 144.390MHz • 5W output **\$139.99**

8631 PacketOnly™ 220 MHz Data Radio Has all features of the 2-meter version. Ready to operate on 223.700MHz • 3W output..... **Closeout \$119.99**
Other frequency crystal pairs available directly from MFJ

Available Accessories:

4110 Portable AC power supply, 5100 Data radio cable (MFJ/TAPR), 5100X Data radio cable (PK232), 5100YH Data radio cable (KPC9612), 5100YV Data radio cable (KAM/KPC3), 5106 Open end (6-pin mini Kenwood/Yaesu)



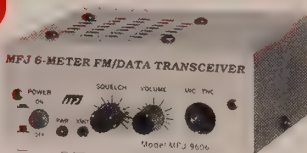
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MFJ

MFJ ENTERPRISES, INC.



9606X 6 Meter FM Communicator™ Transceiver
FM voice or packet • 10W output • Fast PIN diode switching, dual conversion low-noise FM receiver, selectable mode squelch • 52.525MHz crystals installed • Hand microphone included • 13.8V DC @ 2.2A • 5" h x 2.2" w x 5" d, 1.8 lbs..... **\$159.99**

Available Accessories:

4110 Portable AC power supply, 5100 Data radio cable (MFJ/TAPR), 5100X Data radio cable (PK232), 5100YH Data radio cable (KPC9612), 5100YV Data radio cable (KAM/KPC3), 5106 Open end (6-pin mini Kenwood/Yaesu)



LOW POWER SINGLE BAND SSB MOBILE TRANSCEIVERS

Easy to operate! No microprocessor – just turn on and tune in. • 20W PEP* – plus Constant Current™ syllabic speech processing for an added 4-6dB advantage to cut through noise, fading, and QRM. Includes a handheld dynamic mic that complements the speech processing. *Less on VHF models. • Low drain – 3A from 12V supply or battery. • Low noise preamp and active double balanced mixer front end • Excellent selectivity – Sharp 2.3 kHz SSB crystal ladder filter reduces passband noise, fights QRM, and improves intelligibility • TVI protection (built-in 7 element lowpass filter) • Real S-meter: Position your beam with accuracy and give meaningful reports. Also, monitor speech processing level. • Agile tuning – reduction drive analog VFO lets you scan the band for signals quickly, then zero in smoothly • Amplifier jack • 2½" h x 6½" w x 6" d, 2lbs.

9402X 2M SSB Adventure Radio™, 7W.... **\$269.99**

9406X 6M SSB Adventure Radio™, 10W.. **\$249.99**

9410X 10M SSB Adventure Radio™, 20W **\$249.99**

Available Accessories:

416 CW adapter, 971 200W HF tuner (9410X only), 1770A 10M dipole for 9410X, 1776 6M dipole for 9406X, 4110 Portable AC power supply, 4114 Rechargeable power pack

RANGER

Communications, Inc.



DUAL BAND MOBILES

RCI-2950DX 10/12 Meter Transceiver An old favorite updated with 12M band, improved receiver, double FET balanced mixer, surface mount components and improved display lighting. Covers 24.8-24.990 and 28.0-29.7MHz • 25W (SSB), 12W (CW), 10W (AM/FM) • Dual VFO • RIT • Noise blanker • Standard repeater offsets • Programmable tone • Large display with 4-step dimmer • Scanning • 10 programmable frequencies • Lockout **\$249.99**

RCI-2970DX Higher power version. 150W (SSB PEP), 50W (CW/FM/AM) **\$369.99**

YAESU



SINGLE BAND MOBILES

FT-1500M 2M FM Transceiver Transmit: 144-148 MHz, receive: 134-174MHz • 10 NOAA weather channels with "Weather Search" • 50/25/10/5W • Alphanumeric channel display • 130 multi-function memories with 6-character alphanumeric labels • SmartSearch™ automatic memory loading • Priority channel • 16-digit, 8 memory DTMF autodialer • 50-tone CTCSS enc/decode • Bell alert CTCSS paging • Auto repeater shift (ARS) • 1200/9600 baud compatible, rear panel data jack • Time-out timer • Auto power-off • DTMF direct access mic • MIL-STD 810 D/E • DC voltage display • 13.8V DC @ 9.5A • 5" w x 1.4" h x 4.9" d, 2.2 lbs **Special \$159.99**

Available Accessories:

ADMS2F Programming software, MH36C8J Extra TTP microphone, MLS100 Mobile speaker, SP7 External speaker



FT-2600M Heavy-duty 2M FM Transceiver
Transmit: 144-148MHz, receive: 134-174MHz
• Selectable channel steps • Advanced track tuning • 60/25/10/5W • Alphanumeric channel display • Programming menu holds 33 operational settings • 175 multi-function memories with 8-character alphanumeric labels • High-speed, multifunction scanning • SmartSearch™ automatic memory loading • Auto Range Transpond System™ • CTCSS and DCS encode/decode • Automatic repeater shift (ARS) • 1200/9600 baud compatible, rear panel data jack • Time-out-timer • Auto power-off • Back-lit DTMF direct access microphone provides user-programmable function keys • 8-memory, 16-digit DTMF autodialer • Front mounted speaker • PC programmable with optional software • DC voltage display • MIL-STD 810 rating • 13.8V DC @ 9.5A • 6.3" w x 1.6" h x 6.3" d, 2.9 lbs..... **Special \$199.99**

Available Accessories:

ADMS2E Programming software, MLS100 Mobile speaker, SP7 External speaker



FT-3000M High-Powered 2M FM Transceiver
Transmit: 144-148MHz • Wideband receive: 110-180, 300-520, 800-824, 849-869 and 894-999MHz (cell blocked) • Sub-receiver (split and full duplex cross band, dual watch) • 70/50/25/10W (twin cooling fans) • Programming menu holds over 50 operational settings • 81 memories • Programmable memory scanning and tuning, SmartSearch™ • Large alphanumeric LCD display • CTCSS and DCS encode • Digital coded squelch (DCS) • Spectrum scope • ARTS™ • 1200/9600 baud compatible ready • Auto repeater shift • Adjustable display brightness • Time-out-timer • Auto power-off • Back-lit DTMF direct-access mic (user programmable function keys) • 13.8V DC @ 15A • MIL-STD 810 rating • 5.5" w x 1.6" h x 7.1" d, 2.8 lbs **Special \$389.99**

Available Accessories:

ADMS2D Programming software, CT39 Packet cable, DV54 Voice recording module, FTS17A Encoder/decoder, MLS100 Mobile speaker

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Certificates may be purchased from our Milwaukee store by calling 1-800-558-0411.



Manufacturer	MFJ	MFJ	MFJ	YAesu	YAesu	YAesu
Model	940EX	9410X	9606X	FT-1500M	FT-2600M	FT-3000M
Band	6 meters	10 meters	6 meters	2 meters	2 meters	2 meters
TX Range (MHz)	50-50.3	28.3-28.6	52.525	144-148	144-148	144-148
Rx Range (MHz) ⁽¹⁾	50-50.3	28.3-28.6	52.525	137-174	136-174	110-180, 300-520, 800-999
Aircraft Rx	No	No	No	No	No	Yes
Power Output	10W SSB	20W SSB	10W	50/25/10/5W	60W	70/50/25/10W
TP Microphone	No	No	No	Yes	Yes	Yes
Tone Encode	No	No	No	Yes	Yes	Yes
Tone Decode	No	No	No	Yes	Yes/DCS	FTS-17A
Memories	0	0	0	130	60	81
Alphanumeric	No	No	No	Yes	Yes	Yes
PC Programmable	No	No	No	Yes	Yes	Yes
13.8V DC@	1.2A	2A	>1A	8A	10A	15A
Antenna Conn	S0-239	S0-239	S0-239	S0-239	S0-239	S0-239
Size (h/w/d, in.)	2.5/6.5/6	2.5/6.5/6	1.5/5/5	1.4/5/5	1.6/6.3/6.3	1.5/5.5/7
Weight (lbs.)	2	2	0.8	2.2	2.9	2.75

(1) Requires keyboard modification
 (2) Expanded memory requires optional EI-19U
 (3) Receive only on 70cm
 (4) 2 Piece configuration only
 (5) 2M/220MHz Transceiver
 (6) All models are Cellular Blocked
 (7) AM aircraft receive mode
 (8) Does not include projections (knobs, antenna jacks, etc.)
 (9) Manufacturer only guarantees specs within the ham bands
 (10) Requires internal modification (available on request)
 (11) There are gaps in non-voice or data portions in certain bands

All radios are cell blocked

FREE ITEMS included with some radios.
See Price Guide for details.

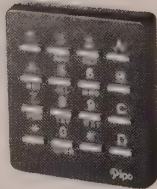
FREE ITEMS included with some radios.
See Price Guide for details

DUAL BAND MOBILE TRANSCEIVERS

Pipo Communications

QUALITY DTMF ENCODERS

- 12- or 16-digit pads • Steel keys
- Sealed gold dome contacts
- Self-contained • 8.5 to 16V DC
- NO RFI • Simple 3-wire connection • Temp: -22 to +160 F
- Adjustable level and timing
- Front panel adjustable • Includes template, hardware and schematic



PK-1 2.65" h x 2" w x .045"..... **\$71.99**

PK-2 (pictured) 2.65" h x 2.5" w x .045" **\$76.99**

K-Series: features a built-in keying circuit and relay to automatically key. When any key is depressed, a relay closes for 0-3 seconds, time is adjustable with a trimpot.

PK-1K \$78.99 - PK-2K \$83.99

PK-2M M-Series a special encoder package for mounting PK-1/1K, PK-2/2K encoder to surfaces inaccessible from the rear. Consists of a frame which secures to the mounting surface with the encoder press-fitting into the frame..... **\$76.99**

YAESU



FT-90R 2M/440MHz FM Transceiver Micro-sized with built-in cooling fan • TX: (2M) 144-148MHz; (440MHz) 430-450MHz • Wideband rx: 100-230, 300-530, 810-999.975MHz (cell blocked), includes AM aircraft • 50/20/10/SW (2M), 35/20/10/SW (440 MHz) • 186 memories with 7-character alphanumeric labels • 5 scanning modes • Built-in CTCSS/DCS enc/dec • ARTS™ • 1200/9600bps compatible • Auto repeater shift • Time-out-timer • Ultra-compact remote-head capability • DTMF direct access mic with user-programmable keys • 8-memory, 16-digit DTMF autodialer • Memory cloning • 13.8V DC @ 9.5A • 3.9" w x 1.2" h x 5.4" d, 1.42 lbs..... **\$359.99**

Available Accessories:

ADMS2E Programming software, MEK2 Mic extension kit, MLS100 Mobile speaker, SP7 External speaker, YSK90 Remote separation kit



FT-8100R 2M/430MHz FM Transceiver TX: (2M) 144-148MHz; (440MHz) 430-450MHz • Wideband rx: 110-550, 750-1330MHz (cell blocked) • 50/25/5W (VHF), 35/20/5W (UHF) • 310 memories • 6 scanning modes • SmartSearch™ • Priority channel • Full crossband duplex and repeater capability • CTCSS enc (39 tones) • Auto repeater shift • 1200/9600bps compatible, rear panel data jack • Time-out-timer • Detachable remote control head • Built-in duplexer • DTMF direct access mic with user-programmable keys • 6-memory DTMF autodialer • DC voltage display • 13.8V DC @ 10A • 5" w x 1.4" h x 4.9" d, 2.2 lbs **\$419.99**

Available Accessories:

ADMS2D Programming software, CT39 Packet cable, FTS22 CTCSS decode unit, MEK2 Mic extension kit, MLS100 Mobile speaker, MMB60 Quick release mobile bracket, YSK8100 Remote separation kit



TONE SIGNALLING

NC-101 Encoder Micro-mini. CTCSS encoder, field tunable to any of the CTCSS tone frequencies between 67Hz to 254Hz. 5 to 15VDC. 0.60" w x 0.80" l x 0.15" h **NorFax™ #5040 \$19.99**

NC-104

Programmable Encoder Sub-mini., field programmable CTCSS encoder unit for limited space. Provides standard 37 EIA CTCSS tones + 69.37, 97.4 and 205.5Hz. 7 to 24VDC. 0.625" w x 0.80" l x 0.170" d **NorFax™ #5150... \$24.99**

NC-106 Programmable CTCSS Encoder/Decoder A sub-miniature crystal-controlled digital unit. Field programmable with dip switches providing any one of the standard 37 CTCSS tones + 97.4Hz. 6-24VDC. 0.85" w x 1.35" l x 0.28" h **NorFax™ #5230..... \$59.99**

NC-401 Touch-Tone® Decoder Unique micro-mini unit combining two distinct multi-addressable decoders for control of remote or local applications. Decodes all 16 DTMF characters with an address length of 1-14 characters and features EPROM memory for storage of both primary and secondary codes, input/output functions, deadbeat disable and user outputs, plus default reset. Programming easily performed by means of a conventional DTMF encoder. 6-24V DC. 0.80" w x 1.37" l x 0.23" h. **NorFax™ #5545 \$59.99**

More Info: Call the NorFax™ automated 24-hr. fax retrieval system - 530-477-8403



CD-2 Communications Decoder Unit When mobile, this unit makes it easy for you to use open repeaters and autopatches by decoding and displaying any CTCSS, DCS or DTMF codes other amateurs are using on a channel. When at the base, the RS-232 port exports all decoded CTCSS/DCS or DTMF data to your PC allowing use of CD-2P software. Maintains a history of CTCSS/DCS/DTMF data from the CD-2 occurring on the channel being monitored, creates usage graphs, etc. PC/DOS based. 12-15 VDC. 4.9" w x 4.5" d x 1.9" h, 1 lb **Closeout \$169.99**

CD-2P PC Program for CD-2 **Closeout \$69.99**

COMMUNICATIONS SPECIALISTS, INC.

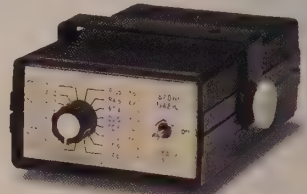
TONE ENCODERS & DECODERS

SS-64 Programmable CTCSS Encoder Super small for easy install in most HTs. Standard with 64 EIA tones between 33 and 254.1Hz. Individual tones dip-switch selectable 0.66" x 1.08" x 0.21", requires 6-28 VDC **\$28.99**



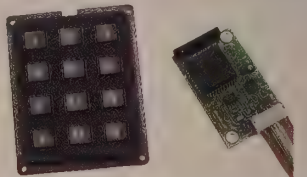
TS-64DS Field programmable CTCSS Encoder-Decoder DIP switch programmable for 64 EIA tones 33-254.1Hz. 1 1/4" x 2", 0.3", 6-28 VDC **\$57.99**

DTD-1 DTMF Decoder Small, high quality, low cost. Decodes any one of 5,040 4-digit codes to provide a latched or momentary open collector output for single function operations. 1 1/4" x 2" x 0.4", requires 7-16 VDC..... **\$49.99**



TE-32 Multi-tone Encoder Provides direct access from a front dial rotary switch to all EIA CTCSS tones from 67.0 to 203.5Hz, allowing users to access various repeaters. Great for mobile or test bench. 5 1/2" x 3.3" x 1.7", 6-30 VDC..... **\$49.99**

TE-64 Multi-purpose Encoder Provides 64 tone frequencies. Includes 32 sub-audible, 19 burst-tone, eight Touch-Tone® and 5 test frequencies. Separate outputs for high and low frequency ranges. 5 1/2" x 3.3" x 1.7", 6-30 VDC **\$79.99**



ID-8 Multi-Featured Automatic Morse ID'er Programmable via 12-button pad. Eight changeable messages, 200 characters total. CW speed: 1-99 wpm; ID interval timing: 1-99 min.; ID hold-off timing: 0-99 seconds; CW tone: 100-3000Hz. Board: 1.85" x 1.12" x .035"..... **\$69.99**

Many wiring diagrams for installing ComSpec units in older equipment are available at www.com-spec.com. Also posted is a list of documents that can be obtained from their Fax-on Demand system.



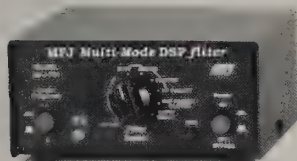


8621 2 meter Packet Data Radio High-performance thru 9600 baud. Plug in TNC cable*, your antenna and power – you're ready for packet. Crystal control on 145.01MHz, 5W output. Requires 12 VDC @ 1A. 5" w x 5 1/2" d x 1 1/2" h **\$119.99**

8631 220MHz Packet Data Radio Same as 8621, with 223.700MHz & 3W output **Closeout \$119.99**

8621X2 Dedicated VHF Data Radio for APRS Automatic Packet Reporting System transceiver. Ready to go on 144.39MHz **\$139.99**

*See Price Guide for pre-wired 8621-to-TNC cables. Crystals for other packet channels may be ordered from MFJ by calling 1-800-647-1800.



781 DSP for all TNCs This separate unit gives your Kantronics, Timewave, etc TNC Digital Signal Processing power **\$119.99**



1272B/M TNC Switch Pushbutton selection for voice or digital. You specify the radio and TNC connection (ea.) **\$39.99**

www.mfjenterprises.com

Kantronics



MULTI-MODE DATA CONTROLLERS

KPC-3 Plus/128 1200 bps • Packet, GPS/APRS, Host, KISS and WEFAX modes, use with EMWIN • Personal Mailbox (PBS) now supports multiple calls • Remote access, sensing and control with two A/D and two control lines • PBS 100k, expandable with optional 512k RAM..... **\$179.99**

9612 Plus/128 1200 port and second port of 4800–38,400 bps • Most modes/capabilities of the KPC-3 Plus and POCSAG (paging) • Unique design allows the addition of another port, high or low speed • Remote access, sensing and control capability • Telemetry transmission capability **\$369.99**

KAM 98 Single port multimode TNC for HF and VHF use • Packet, GPS/APRS, Host, KISS, WEFAX, CW, RTTY, AMTOR, PACTOR, G-TOR*, Free signal detection for HF email, A/D inputs/TTL outputs • HC11 for more processing power to accommodate future upgrades • Wider range of speeds; use 1200 bps packet on 10 meters..... **\$399.99**



1270C TAPR TNC-2 Clone Interfaces computer with RS-232 serial port and terminal program for VHF/UHF, OSCAR and other non-FM packet. Switchable HF/VHF modems. EasyMail™ personal mailbox, WeFAX. KISS interface for TCP/IP, 256K EPROM & 32K RAM. AX.25/Level 2-V2 software. Comes with interface cable, serial port connector and AC adapter. 12 VDC. 9 1/2" x 7 1/2" x 1 1/2" **\$119.99**

1270CT adds 2400 baud modem ... **C/O \$129.99**

1270CQ adds 9600 baud modem **\$229.99**

2400 2400 baud modem **Closeout \$19.99**

9600B G3RUH compatible 9600 baud modem. Easy installation in MFJ TNCs..... **Closeout \$89.99**



1278B Multi-mode Data Controller 10 modes: PACTOR, 16-level FAX, color, SSTV, PACKET, AMTOR, RTTY, ASCII, CW Navtex & memory keyer. Enhanced mailbox • 32K RAM • 16-gray level modem • 20 LED tune indicator • MARS mode • Internal modem header • 10 program message buffers • Dual radio ports • KISS interface • Host mode • Threshold control • RS-232/TTL ports • 12 VDC • 9 1/2" w x 9 1/2" d x 1 1/2" h **\$279.99**

1278B/DSP The 1278B w/DSP filter **\$359.99**

1278BT Same as MFJ-1278B except Turbo version, includes a 2400 baud modem.... **Closeout \$269.99**

780 DSP Board Plug-in "brick wall" DSP data filter for MFJ-1278B..... **\$89.99**

PacComm www.paccomm.com Packet Radio Systems, Inc.



Pico 128K Miniature TNC (bottom right) Z-181 high integration MPU with one meg address space • Online help • Personal message system • APRS • Terminal programs for DOS and Windows • Open squelch DCD circuit included • Optional internal GPS receiver and slide-on battery pack. 1" h x 2 1/2" w x 3 1/2" d • Standard model with 128K RAM... **\$149.99**

Pico Dual 128K Dual Serial Port Model Adds hardware clock and second serial port for GPS or weather station to the standard model.... **\$199.99**

Tiny-2 MK-2 Multi-Purpose Basic TNC (top) 32K RAM • TNC-2 EPROM compatible WA8DED host mode • KISS mode for satellite and TCP/IP Telemetry via RS-232 or TTL port • Disconnect header • Packet communication for a weather node • 45ma. draw • 5" h x 7" d 1 1/2" h **\$149.99**

Tiny-2 MK-2/GPS Tracker Same as the Tiny-II with a built-in GPS unit. Supplied with a small magnetic-mount Trimble GPS antenna **\$499.99**

Spirit-2 High Performance Packet Controller (bottom left) Configures by setting jumpers and installing optional logic devices **\$239.99**

HandiPacket Packet controller For portable or mobile operation • Loaded with features • Built-in 10-hour battery pack • 1 1/4" h x 2 1/2" w x 4" d **\$229.99**



HAL COMMUNICATIONS CORP.
www.halcomm.com



DXP-38 Multimode HF Modem Stand-alone DSP modem providing excellent performance on RTTY, CLOVER, ASCII, AMTOR and P-Mode. Both DOS and Windows (95, 98 and NT 4.0) software are provided at no added cost. Uses the same serial I/O commands as, and will operate with any third-party software written for the DSP-4100. 12V DC @ 0.6A. 3" x 7 1/2" x 10" w **\$395.99**



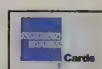
RTTY-1 Tuning Indicator Easy to use and very accurate. Works with virtually any FSK radio modem. The crossed LED bars show correct tuning for all popular FSK modes including Baudot Teletype (RTTY), ASCII Teletype, AMTOR, SITOP, P-Mode, HF Packet Radio. Filters: 2125 Hz (Mark), 2295 Hz (Space) 5.5" w x 3.75" h x 1.25" d, 0.5 lb. Requires +9V-18V DC @ 160 ma **\$99.99**



PK-12 1200 bps VHF/UHF TNC 1200 bps, VHF Packet-ready • Gateway as a node • PC PakRatt Lite™ control software included • APRS™ software included • APRS adapter cable available • AEA host mode • Advanced command set • Identify TCP/IP, TheNet and NetRom • GPS firmware and commands • Stand alone tracking • External TX adjust. • Perfect for base station, loaded w/features for mobile • Ext. 12V DC, or 9V batt. • 5 1/2" w x 5 1/2" d x 1 1/2" h, 12 oz.... **\$129.99**



PK-96/100K 9600/1200 packet TNC 9600 and 1200 bps packet-ready • GPS firmware standard • Remotely program • GPS commands • Stand-alone tracking hardware HDLC for accuracy • True DCD to hear weak signals • Gateway as a node • TheNet X-1J node firmware option available • Full MailDrop facility • PC PakRatt Lite™ terminal control software and APRS™ software included • AEA host mode • Advanced command set • Identify TCP/IP, TheNet and NetRom • Separate external TX for 9600/1200 bps adjustments • External reset • Windows™ and Macintosh™ program available • Requires 12V DC • 6 1/2" w x 7 1/2" d x 1 1/2" h, 1 1/4 lbs. 128K RAM .. **\$169.99**



We accept I.M.P.A.C.® Government Credit Cards





POWER SUPPLIES

The alternative to costly "matching" Supplies!

• 105-125V AC input, 13.8V DC output; internally adjustable from 11-15V • Electronic regulation with fold-back current limiting and crowbar overvoltage protection • Heavy-duty heat sink • 3-wire cord • 1-year Warranty • Made in U.S.A.

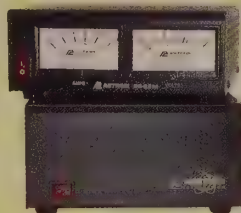
Separate volt and amp meters on RS-20M, 35M, 50M and 70M. Separate volt and amp meters, plus voltage adjustment (2-15V DC) on VS-20ML, VS-35M and VS-50M. RM-35M, RM-50M and RM-60M are rack mount models, plus separate meters.

Model	Cont. Amps	ICS Amps	Size (in.) H W D	Shipping weight	Price
RS-7A	5	7	3 1/2 x 6 1/2 x 9	9	\$59.99
RS-10A	7 1/2	10	4 x 7 1/2 x 10 1/2	11	69.99
RS-12A	9	12	4 1/2 x 8 x 10 1/2	13	79.99
RS-20A	16	20	5 x 9 x 10 1/2	18	99.99
RS-35A	25	35	5 x 11 x 11	27	149.99
RS-35A/220V	Same as RS-35A but 220V input				169.99
RS-50A	37	50	6 x 13 1/2 x 12	46	219.99
RS-70A	57	70	6 x 13 1/2 x 12	48	259.99
With separate Volt & Amp meters					
RS-20M	16	20	5 x 9 x 10 1/2	18	119.99
RS-35M	25	35	5 x 11 x 11	27	169.99
RS-50M	37	50	6 x 13 1/2 x 11	46	239.99
RS-70M	57	70	6 x 13 1/2 x 12	48	289.99
Adjustable output; separate Volt & Amp meters					
VS-20ML	16	20	5 x 9 x 10 1/2	20	139.99
VS-35M	25	35	5 x 11 x 11	29	189.99
VS-50M	37	50	6 x 13 1/2 x 11	46	259.99
Rack mount models; separate Volt & Amp meters					
RM-35M	25	35	5 1/2 x 19 x 12	38	249.99
RM-50M	37	50	5 1/2 x 19 x 12	50	279.99
RM-60M	50	55	7 x 19 x 12	60	359.99

POWER SUPPLIES WITH ADDED FEATURES

RS-4L Has a built-in cigarette lighter receptacle in the front panel. 13VDC @ 4A peak, 3 Amps continuous. 3 1/2" h x 6 1/2" w x 4 1/2" d, 6 lbs **\$49.99**

RS-12S Power supply with built-in speaker. Rated 13VDC @ 12 Amps peak and 9 Amps continuous. 4 1/2" h x 8" w x 9" d, 13 lbs **\$89.99**



SWITCHING POWER SUPPLIES

SS-25 12V DC, rated 20 amps continuous, 25 amps ICS. 3" h x 7" w x 9 1/2" d, 4.2 lbs **\$109.99**

SS-25M Same as above, but also includes voltage and amp meters **\$129.99**

SS-30 12V DC, rated 25 amps continuous, 30 amps ICS, 3 1/2" h x 7" w x 9 1/2" d, 4 1/2 lbs **\$119.99**

SS-30M Same as above, but also includes voltage and amp meters **\$139.99**

POWER INVERTERS

12/115 (General Purpose) Converts 12V DC to 115VAC @ 60 Hz. Provides convenient AC house current in your boat, car, truck, camper, etc. Powers your ham rig, small household appliances, TV, tools, radios and lights up to 200W continuous, with peaks up to 240W and overload protected. Note: This unit produces square wave output, not recommended for devices where high transients are not tolerable. 4 1/2" h x 8" w x 9" d, 9 lbs **\$69.99**

N2412-12 (28V Aircraft) Converts 22 to 32V DC input to 13.8V DC output @ 9 amps. Eliminates tapping into a 28V battery for 12V power **\$49.99**

N2412-24 Same as the model above, but is rated at 16 amps **\$79.99**



DM-340MVT DC Power Supply Input: 120V AC 50/60Hz • Output: 13.8V DC (0-15V adjustable) • Rated at 30A continuous - 35 amps maximum • Voltage Regulation: Under 2% • Ripple Voltage: Under 30mVp-p • Protection: Automatic shutdown over 35A • Separate volt and amp meters • Internal cooling fan • Binding posts • Quick-connects • Convenient front panel cigar lighter socket • Dimensions: 9" w x 6" h x 9" d, 19 lbs **\$179.99**



GZV-4000 Switching Mode DC Power Supply with Built-in Speaker 120V AC input • Variable output: 5-15V DC with center detent at 13.5V DC • 40 amps continuous rating, 100% duty cycle • Over temperature, overload, short-circuit protection with current foldback at approximately 42 amps • Overload indicator • Selectable monitoring of voltage and current • DC terminals on rear • Cigarette lighter jack on front • Filtered AC line • 8 1/2" x 13" x 4 1/2", 8 lbs **\$179.99**



COMPACT INVERTERS

PowerVerter® Ultra These Low Cost DC to AC Inverters give you access to AC power wherever you need it. Harnessing the 12-volt battery power of your automobile, boat, RV or service truck, they let you use power tools at an out-of-the-way work site, household appliances at a campsite, or office equipment on the road.

Features: • Converts vehicle battery power to clean, safe and efficient AC power • Ultra compact design • Choice of 140w or 300w models • Plugs into vehicle cigarette-lighter socket (includes plug) • Electronic circuit protection • Low battery alarm and shutdown • Illuminated On/Off switch • Metal housing • Built-in high-speed cooling fan (PV-300)

PV-140 Offers 140W maximum continuous power and 200W surge capacity (peak power). This model has a modified sine wave and one AC receptacle. 6" l x 3" w x 1 1/2" d, 1 lb. 4 oz **\$47.99**

PV-300 This model is designed to deliver 300W maximum continuous power and 500W of surge capacity. It also offers a modified sine wave and two AC receptacles. 6" l x 4" w x 1 3/4" d, 2 lbs **\$72.99**



SURGE SUPPRESSORS

SUPER-7 For spike suppression and noise filtering, 18,000 amp surge suppression, and RFI/EMI filtering. Seven outlets, 7 foot cord, three diagnostic LED indicators **\$19.99**

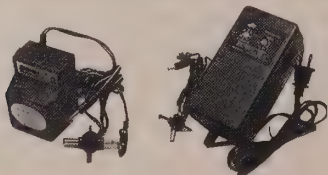
SUPER-7+TEL Same as above, but features fax/modem protection for RJ-11 modular jacks **\$29.99**

ISOBAR-8 ULTRA Premium Surge Protector Rugged all metal housing - won't break or burn • Isolated filter banks to eliminate interference between connected equipment • Massive 1,200 joule, 96,000 amp spike suppression • Diagnostic alarm system indicates wiring faults, protection circuitry and power line status • 8 outlets, extra long 12 foot cord **\$79.99**



SMALL POWER SUPPLIES

38-384 Light Duty DC Power Supply Input: 115V AC • Output: 13.8V DC regulated @ 4A • Front panel binding posts, • LED "ON" indicator, fuse protection • 7 1/2" d x 4 3/4" w x 3" h, 5 1/2 lbs **\$39.99**



38-305 AC Adapter (left) Provides multiple low-voltage DC to operate various battery powered equipment requiring 3, 4.5, 6, 7.5, 9 or 12V DC with a maximum current rating of 500ma. Multiple application plugs and 9V snaps fit most devices... **\$9.99**

38-312 Regulated AC Adapter (right) Multi-voltage with multiple plugs and 9V snaps. Selectable 1.5, 3, 4.5, 6, 7.5, 9 or 12V DC regulated with a maximum current rating of 1200ma. to operate a wide range of battery operated devices..... **\$29.99**



MFJ Switching Power Supplies

Power your HF transceiver, 2 meter/440 MHz mobile/base and accessories with these 25 or 45 Amp MFJ MightyLite™ Switching Power Supplies!

No RF hash . . . Super lightweight . . . Super small . . . Volt/Amp Meters . . .



4125



4225MV



4245MV

MFJ's adjustable voltage switching power supplies do it all! You can power your HF transceiver or 2-Meter/440 MHz mobile or base and accessories with ease.

MFJ's MightyLites™ are so light and small you can carry them in the palm of your hand! Take them with you anywhere – No more picking up and hauling around heavy, bulky supplies.

MFJ's 25 Amp MightyLite™ weighs just 3.7 lbs. -- that's 5 times lighter than an equivalent regular power supply. The 45 Amp'er is just 5.5 pounds!

No RF hash!

Some competing switching power supplies generate objectionable RF hash in your transmitted and received signal. But, these babies are clean!

Low Ripple and Highly Regulated

Less than 35 mV peak-to-peak ripple under 25 or 45 amp full load. Load regulation is better than 1.5% under full load.

Fully Protected

You won't burn up our power supplies! They are fully protected with Over Voltage and Over Current protection circuits.

Worldwide Versatility

MFJ MightyLites™ can be used anywhere in the world! They have switchable AC input voltage and work from 85 to 135 VAC or 170 to 260 VAC. Replaceable fuse.

MightyLites™ . . . Mighty Features

MFJ MightyLites™ model 4225 and 4245MV feature a front-panel voltage control. Lets you vary output voltage from 9–15VDC, highly regulated. You get an easy access front-panel with five-way binding posts for heavy duty use and a cigarette lighter socket for mobile accessories. 4245MV has two sets of quick-connects on the rear for accessories.

Large 3 inch dual meters are brightly illuminated

to make it easy to monitor load voltage and current.

A whisper quiet internal fan efficiently cools your power supply for long life.

MFJ "No Matter What™ Warranty"

MFJ will repair or replace (at MFJ option) your MightyLites™ supply for one full year.

Three models to choose from . . .

4125 (left) Basic, no metering. 25 Amps maximum or 22 Amps continuous. Measures 5½" w x 2½" h x 10¼" d. Weighs 3.5 pounds **\$99⁹⁹**

4225MV (center) 25 Amps maximum or 22 Amps continuous. Weighs 3.7 pounds. Measures 5½" x 4½" x 6 inches **\$139⁹⁹**

4245MV (right) 45 Amps maximum or 40 Amps continuous. Weighs 5.5 pounds. Measures 7½" x 4½" x 9 inches **\$189⁹⁹**

MFJ 35/30 Amp Adjustable Regulated DC Power Supply

Massive 19.2 pound transformer . . . No RF hash . . . Adjustable 1 to 14 VDC . . .

MFJ's heavy duty conventional power supply is excellent for powering HF or 2 Meter/440 MHz transceiver/accessories.

A massive 19.2 pound transformer makes this power supply super heavy duty! It delivers 35 amps maximum and 30 amps continuous without even flexing its muscles. Plugs into any 110 VAC wall outlet.

It's highly regulated with load regulation better than 1%. Ripple voltage is less than 30 mV. No RF hash -- it's super clean!

Fully protected -- has over voltage protection, fold back short circuit protection and over-temperature protection.

You get front panel adjustable voltage from 1 to 14 VDC with a convenient detent set at 13.8

VDC. A pair of front-panel meters let you monitor voltage and current.

Three sets of output terminals include a pair of heavy duty five-way binding posts for HF/VHF radios, two pairs of quick-connects for accessories and a covered cigarette lighter socket for mobile accessories.

A front-panel fuse holder makes fuse replacement easy. Whisper quiet fan speed increases as load current increases -- keeps components cool. 9½" w x 6" h x 9¾" d.

The 4035MV is protected by MFJ's famous No Matter What™ one year limited warranty. MFJ will repair or replace (at MFJ option) your product for 1 full year.



4035MV **\$139⁹⁹**

MFJ High Current Multiple DC Power Outlets

Power two HF/VHF transceivers and six or more accessories from your 12 VDC power supply



1118 (left) This is MFJ's most versatile and highest current Deluxe Multiple DC Power Outlet. Lets you power two HF and/or VHF transceivers and six or more accessories from your transceiver's main 12 VDC supply.

Two pairs of super heavy duty 30 amp 5-way binding posts connect your transceivers. Each pair is fused and RF bypassed. Handles 35 Amps total. Six pairs of heavy duty, RF bypassed 5-way binding posts let you power your accessories. They handle 15 Amps total, are protected by a master fuse and have an ON/OFF switch with "ON" LED indicator.

Built-in 0-25 VDC voltmeter. Six feet of super



heavy duty eight gauge color-coded cable with ring tongue terminals. Binding posts are spaced for standard dual banana plugs. Heavy duty aluminum construction. 12½ x 2½ x 2½ inches. **\$74⁹⁹**

MFJ HF DC Power Outlet

1117 Similar to 1118 but powers up to 4 different radios at the same time. Two 35A single posts, one 35 amp dual post. Size: 8" x 2" x 3", fits anywhere at your operating position. No meter, power LED or on/off switch **\$54⁹⁹**



1116 (center) Similar to 1118. No 30 amp posts. Has "ON" LED and 0-25 VDC voltmeter. 15 amps total **\$49⁹⁹**

1112 (right) Similar to 1116. No on/off switch, LED, meter or fuse **\$34⁹⁹**

Each has MFJ's famous No Matter What™ one year limited warranty. MFJ will repair or replace (at MFJ's option) your high current multiple DC power outlet for 1 year.



We accept I.M.P.A.C.® Government Credit Cards

MIRAGE



VHF/UHF AMPLIFIERS

Add a MIRAGE amplifier to your rig for 30 to 600 watts of BRUTE POWER! Models for 6 meters through 70 cm – Base, Mobile, Repeater or ATV operation • 12V DC • FM/SSB/CW modes • Continuous duty • 20dB GaAsFET preamp • Overdrive and High-temperature protection • Remote control capability

Model	MHz	Max Input	Max Output	Amps	Pre-amp	Price
A-1015G	50-52	1-15W	150W	23	yes	\$349.99
B-34	144-148	8W	35W	4	no	69.99
B-34G	144-148	8W	35W	4	yes	89.99
B-55G	144-148	10W	50W	5	yes	109.99
B-215G	144-148	0.25-5W	150W	20	yes	339.99
B-1016G	144-148	0.2-15W	160W	25	yes	339.99
B-1030G	144-148	10W	300W	48	yes	619.99
B-2516G	144-148	20-35W	160W	25	yes	269.99
B-2530G	144-148	10-35W	300W	48	yes	619.99
B-5016G	144-148	20-60W	160W	22	yes	269.99
B-5030G	144-148	0.5-50W	300W	48	yes	599.99
B-310G	144-148	0.25-8W	100W	15	yes	179.99
B-320G	144-148	2.5-50W	200W	25	yes	399.99
B-510G	144-148	2.5-50W	100W	15	no	209.99
BD-35	144/440	1-7W	45/35W	7	no	149.99
C-22G	222-225	2W	20W	5	yes	154.99
C-211G	222-225	2W	110W	20	yes	299.99
C-1012G	222-225	10W	120W	25	yes	299.99
C-1022G	222-225	10W	220W	20*	yes	589.99
C-2512G	222-225	30W	120W	25	yes	289.99
C-2522G	222-225	30W	200W	42	yes	589.99
C-5012G	222-225	50W	120W	25	yes	299.99
C-5022G	222-225	50W	200W	42	yes	579.99
D-15N	425-450	2W	15W	3	no	169.99
D-26N	430-450	2W	60W	12	no	244.99
D-1010N	430-450	10W	100W	15	no	354.99
D-3010N	430-450	30W	100W	20	no	329.99
D-1010ATVN	430ATV	10W	100W	20	no	369.99

* at 28VDC N denotes Type-N connectors

RC-1 Remote Control Head For most Mirage amps. Controls: Power/preamp On/Off, SSB/FM mode switch. 18 inch cable. 1½h" x 3¾w" x 2¼d". **\$45.99**



SG-500 (52-96)

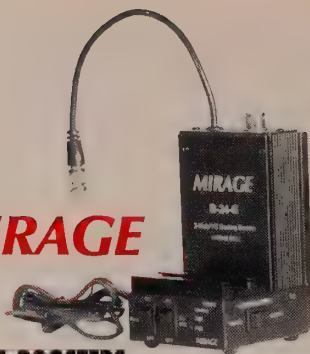
SmartPower Cube™ A fully automatic band switching, micro-processor-controlled, HF linear amplifier. Ideal for fixed, mobile, and marine operation. Nearly indestructible! Cast-aluminum enclosure, extra heavy duty heat sinks, powder coat finish and durable electronic components.



Microprocessor: Automatically adjusts amplifier input sensitivity; Monitors all parameters for faults (heat, VSWR, under-voltage, etc.) Auto selects the correct broadband filter. Operates unattended!

Frequency range: 1.6-24MHz • Power output: 500W PEP with 50-90W input • CW rating: 500W output for 10 min., or unlimited with optional fan installed • 10-18 VDC @ 40A average (SSB), 90A peak, or CW • 6"h x 12.25"d x 11.4"w, 21 lbs **\$1169.99**

MIRAGE



DOCKING BOOSTERS

Slide your handheld into a Mirage docking booster and it instantly becomes a powerful mobile or base!

- Boost your mobile or base station levels, up to 50W
- Replace your HT battery
- Becomes a secure and convenient HT holder

Mirage docking boosters have selectable HT voltages that let you use most handhelds. Place it on your dashboard or desk, or use mounting bracket mount for security and convenience with tilt. Requires 13.8 VDC.

B-24-G For 2m FM handhelds Up to 50W output with 0.5-8W input • 18dB GaAsFET preamp with on/off switch • LEDs show preamp on, on air, and transmit • 4.25"h x 3.35"w x 3.25"d • Choose adapter to fit your handheld* **\$114.99**

BD-25 For 2M/440MHz FM HTs Up to 45W (2M) & 35W (440MHz) with 0.5-8W input • Full Duplex feature lets you simultaneously talk on one band and listen on the other with a compatible HT • Auto band selection • LEDs show band and power-on • Reverse polarity protection • 5.25"h x 3.25"w x 3.35"d • Choose adapter to fit your handheld* **\$164.99**

* See Mirage in the Price Guide for HT adapters, and also a listing of Mirage repeater amplifiers.

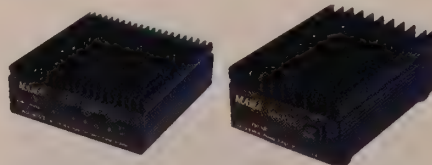


DOCKING BOOSTERS

With the appropriate adapter, you can slide on and boost your ICOM, KENWOOD or YAESU handheld radio up to 50W. Forget about the battery pack, the booster will power the HT at 5W. Also works with ADI & RADIO SHACK HTX-202.

MH-A301 2m FM 5W in/50W out, 18dB GaAsFET preamplifier..... **\$115.99**

MH-A302 Dual Bander (2m) 5W in/45W out; (440MHz) 5W in/35W out **\$165.99**



HT AMPLIFIERS

MH-A101 2m FM, 5W in/35W out **\$69.99**

MH-A102 2m FM/SSB, 5W in/35W out, 15dB GaAsFET preamplifier..... **\$89.99**

MH-A103 2m FM/SSB, 5W in/50W out, 15dB GaAsFET preamplifier..... **\$119.99**

MH-A104 2m FM/SSB, 5W in/100W out, 15dB GaAsFET preamp, adjustable..... **\$229.99**

MH-A201 Dual Bander - 2m 5W in/45W out; 440MHz 5W in/35W out **\$159.99**

TE SYSTEMS



RF POWER AMPLIFIERS

- Linear all-mode operation with automatic T/R or PTT switching and adjustable relay delay control.
- 13.8V DC • SSB, FM or CW operation • Receive GaAs FET low-noise preamp with 18 dbm 3rd-order intercept point for superior weak signal reception and improved strong signal intermodulation rejection • Excellent electrical and mechanical construction integrity. All RF and DC cables attached out of sight on rear panel • Thermal shut-down protection.

TE Model	Freq MHz	In (W)	Out (W)	Amps @13.8V	Preamp NF/Gain	Price
6-meters						
0510G	50-54	10	170	25	.7/15	\$319.99
0552G	50-54	20-25	375	54	.7/15	486.99
2-meters						
1410G	144-148	5-10	160	27	.7/15	328.99
1412G	144-148	25-45	160	22	.7/15	286.99
1452G	144-148	10-25	350	52	.7/15	525.99
3/4-meter						
2212G	222-225	25-45	130	16	.8/14	316.99
70 cm						
4412G	420-450	15-30	100	19	1.2/12	355.99
4452G	420-450	25	185	30	1.2/12	547.99

All models are 3"h x 10"w x 11"d, except 1410G, 2212G and 4412G which are 3"h x 6"w x 11"d. All models have UHF connectors except 4452G which has type-N.



PW-1 HF + 50MHz Solid State Linear Amplifier Frequency range: 160-15m, 6m • Power output with 220V input: 1000 PEP SSB, 1000W CW/RTTY (100% duty cycle, QSK) • 100W drive • Built-in all band automatic antenna tuner • Automatic AC voltage selector and band change • Current, voltage, temperature, SWR, output power protectors • Wide range adjustable ALC allows use with almost any rig • Control head may be detached from main unit (shown) • Built-in 110/220VAC supply • 14"w x 10.5"h x 14.5"d, 56 lbs..... **\$5399.99**

YAESU



QUADRA HF + 50MHz Solid State Amplifier Frequency range: 160-15m, 6m • Power output: 1000W (6m: 500W) • 100W drive • Four twin MOSFET PA modules • Dot matrix multi-function LCD • Two input and four output jacks for easy connection to station antenna • Built-in high-speed automatic antenna tuner • Panoramic SWR display shows "before tuning" and "after tuning" SWR data • SWR protection • Automatic band switching with FT-1000 series, FT-920 and FT-900 • Two input voltages: 117VAC for 500W; 220V AC for 1000W • Separate VP-1000 power supply provides 48 VDC @ 48 amps • 6½" x 5½" x 16½" (each), 59 lbs. total..... **\$3999.99**

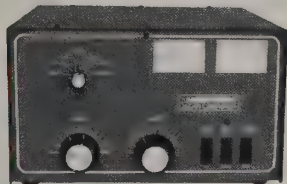


AMERITRON AMPLIFIERS

Ameritron AL-811 amplifiers... a world-wide reputation for legendary quality, flawless performance & proven reliability

AL-811H
\$749⁹⁹

AL-811
\$599⁹⁹



HF Linear Amps with 811A Tubes

Only the Ameritron AL-811H gives you four fully neutralized 811A transmitting tubes. You get absolute stability and superb performance on higher bands that can't be matched by un-neutralized tubes. Delivers 800 watts PEP, 600 watts CW output

Ameritron mounts the 811A tubes vertically – not horizontally – prevents hot tube elements from sagging and shorting out. Others, using potentially damaging horizontal mounting, require special 811As to retard sagging/shorting.

A quiet, powerful computer grade blower draws in plenty of cool air. It pressurizes the cabinet and efficiently cools your 811A tubes. Our air flow is so quiet, you'll hardly know it's there – unlike noisy, poorly chosen blowers.

You also get efficient full size heavy-duty tank coils, full height, computer grade capacitors, heavy-duty high silicon core power transformer, slug tuned input coils, operate/standby switch, transmit LED, ALC, dual meters, QSK compatibility with optional QSK-5 plus more!

Model AL-800 uses three 811A tubes and delivers 600W PEP, 500W CW or 400W continuous output.



AL-800H
\$2299⁹⁹

AL-800
\$1569⁹⁹

HF Linear Amps with the Eimac™ 3CX800A7

Ameritron's AL-800/H amplifiers cover 160-15 Meters including WARC bands. The AL-800 has a single Eimac® 3CX800A7 tube and produces 1250 Watts PEP. Model AL-800H has two 3CX800A7s giving 1500 watts plus.

Both amps have an adjustable slug tuned input circuit, grid protection, ALC control that is front panel adjustable, vernier reduction drives, heavy duty 32 lb. grain oriented silicone steel core transformers & high capacitance computer grade filter capacitors.

These amplifiers have multi-voltage operation (14 user selectable AC line voltage from 90-140; 200-250 VAC), quiet pressurized ventilation systems, dual illuminated Cross-Needle meters that read peak forward and reflected power, SWR, high voltage, grid current and plate current.

Vernier reduction drives make tuning adjustments smooth & easy. Ameritron's exclusive *Step-Start Inrush Protection™* stops damage to your amplifier from inrush current. Amps feature an attractive Lexan front panel decal & superior, all metal construction – it's built to last! Ultra compact desktop size is perfect for your operating station. 8 1/2" h x 16 1/2" w x 14 1/2" d.

AMERITRON offers the best selection of legal limit amplifiers



AL-1500
\$2569⁹⁹

Ameritron's most powerful Linear... single 3CX-1500/8887

Herculean Eimac® 8877 ceramic tube. It's so powerful that 65 watts drive gives you the full legal output – and it's just loafing because the power supply is capable of 2500 Watts PEP.



AL-1200
\$2169⁹⁹

Single 3CX1200A7 linear Amp

Get ham radio's toughest tube with the Ameritron AL-1200 – the Eimac® 3CX1200A7. It has a 50 watt control grid dissipation. What makes the Ameritron stand out from other legal limit amplifiers? The answer: A super heavy duty power supply that loafs at full legal power – it can deliver the power of more than 2500 watts PEP two tone output for a half hour.



AL-80B
\$1199⁹⁹

Desktop Kilowatt Amplifier with 3-500ZG Graphite tube

Full kilowatt PEP output from a whisper quiet compact desktop linear. Only 8 1/2" w x 14" w x 15 1/2" d. Plugs into nearest 120 VAC outlet. Covers all bands 160-15 Meters. 1000 Watts out on SSB, 850 Watts out on CW, genuine Amperex 3-500ZG tube has graphite plate, nearly 70% efficiency, in-rush current protection, multi-voltage transformer.



AL-572
\$1299⁹⁹

Near Legal Limit™

New class of *Near Legal Limit™* amplifier gives you 1300 Watt PEP SSB power output for about 65% of the price of full legal limit amps! Four rugged 572B tubes. Instant 3-second warm-up. Plugs into 120 VAC. Compact – 8 1/2" h x 15 1/2" w x 14 1/2" d. Covers 160 to 15 meters, delivers 1000 watts CW output. Tuned input, instantaneous RF Bias, dynamic ALC, parasitic killer, inrush protection, two lighted Cross-Needle meters, multi-voltage transformer.

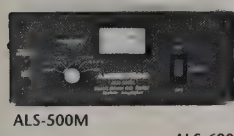
AL-82
\$2069⁹⁹



Dual 3-500ZG linear

This linear gives you full legal output using a pair of 3-500s. Most competing linears using 3-500s can't give you 1500 Watts because their lightweight power supplies can't use these tubes to their full potential.

AMERITRON's legal limit amps are 18" h x 17" w x 10" d and weigh approximately 77 lbs. All use a Super Heavy Duty *Hypersil®* power transformer capable of 2500 WATTS!



ALS-500M



ALS-600

ALS-500M Mobile no tune Solid State mobile amp has 500 watts output and covers 1.5-22 MHz

Ideal mobile amplifier uses 13.8 Vdc mobile electrical system, very compact – only 3 1/2" x 9" x 15 inches, extremely quiet, 500 W output, 1.5-22 MHz coverage, instant bandswitching, no tuning, no warm up, no tubes, SWR protected..... \$699⁹⁹

ALS-600 No tune Solid State base amp includes heavy duty power supply, delivers 600 Watts output

No tuning, no fuss, no worries – just turn it on and operate. Includes AC power supply, 600 W output, continuous 1.5 to 22 MHz coverage, instant bandswitching, fully SWR protected, extremely quiet, very compact. Amp is 6" h x 9 1/2" w x 12" d.. \$1129⁹⁹



ATP-100

ADL-2500

ADL-1500

QSK-5

ICP-120/240

AWM-30

ATR-30

AMERITRON

ACCESSORIES

ATP-100 Tuning Pulser Safely tune amplifiers. Prevents overheating, tube damage, supply stress and component failure..... \$49⁹⁹

ADL-2500 Fan cooled 2500 W dry dummy load 2500 Watts average power for 1 minute on, 10 off minutes of, f 300W continuous. SWR <1.4:1. Quiet fan..... \$189⁹⁹

ADL-1500 Dummy Load with container and oil Oil cooled, 50Ω load handles 1500W for 5 minutes. SWR<1.2:1 to 30MHz, low SWR to 400 MHz..... \$69⁹⁹

QSK-5 Pin diode transmit receive Switch Connects externally to most HF amps. Handles 2.5 kW PEP, 2 KW CW. 6X faster than vacuum relay..... \$329⁹⁹

ICP-120/240 In-rush current protectors Stops power-up in-rush current. Absorbs momentary high-voltage spikes to 1 amp. ICP-120 for 110-120V; ICP-240 for 220-240V.....ea. \$79⁹⁹

AWM-30 Precision SWR Wattmeter Gives true active peak and average readings. Lighted cross-needle meter. 3000/300 Watt ranges..... \$139⁹⁹

ATR-30 True Legal Limit Antenna Tuner True high power even on 160M where most others fail. Edge wound, silver-plated *AirCore™* inductor..... \$549⁹⁹

RCS-8V Remote Coax Switch Replace 5 coax feedlines with a single coax. 1.2 SWR at 250 MHz. Useable to 450 MHz. 1 KW at 150 MHz.... \$139⁹⁹ **RCS-4** 4 position remote switch, wireless.... \$129⁹⁹



RCS-4



ARB-702

ARB-702 Amp-to-radio interface Protects costly transceivers from damage by keying line transients, steady state current & excessive voltages. For Icom, Kenwood or Yaesu ea. \$39⁹⁹

Order Toll Free:

1-800-558-0411

M-F 6:00 A.M. Pacific to
8:30 P.M. Eastern; Sat. to
6:00 P.M. Eastern

MIRAGE

Turn your mobile, base or handheld into a 160 Watt powerhouse and talk further, longer, clearer . . . All modes: FM, SSB, CW . . . GaAsFET preamp . . .

The MIRAGE B-5016-G gives you 160 Watts of brute power for 50 Watts input on all modes -- **FM, SSB or CW!**

B-5016G
\$269⁹⁹



Power Curve - typical B-5016-G output power									
Watts Out	130	135	140	145	150	155	160	160+	
Watts In	20	25	30	35	40	45	50	55	

Ideal for 20 to 60 Watt 2 Meter mobile or base. Power Curve chart shows typical output power.

Hear weak signals - the low noise figure (0.6dB) GaAsFET preamp has selectable 15 or 20 dB gain.

B-5016-G has legendary ruggedness. We know of one that has been in constant use since 1979!

Heavy-duty heatsink spans entire length of cabinet and prevents overheating. Power transistors are protected by MIRAGE's Therm-O-Guard™.

Fully protected from high SWR and excessive input power. Has warning LED.

Has smooth adjustable Transmit/Receive switching with remote external keying.

Draws 17-22 amps @ 13.8 VDC.

Size: 12 x 3 x 5-1/2 inches.



RC-1 Remote Control. On/Off, preamp On/Off, selects SSB/FM. 18 ft. cable \$45⁹⁹

More 160 Watt, 2 Meter Amplifiers . . .

B-2516G For 10 to 35 Watt mobile or base stations. 160 Watts out for 25 Watts in \$269⁹⁹

B-1016G MIRAGE's most popular dual purpose HT or mobile/base amplifier. 160 Watts out/10 Watts in. For 0.2-15 Watt radios..... \$339⁹⁹

B-215G MIRAGE's most popular handheld amp. 150 Watts out for 2 Watts in; 150 Watts out for 3 1/2 Watts in. For 0.25 to 5 Watt HTs \$339⁹⁹

144/440 MHz Amp 45/35 Watt Dual Band

BD-35
\$149⁹⁹



Power Curve - typical BD-35 output power									
Watts Out (2 Meters)	30	40	45	45+	45+	45+	45+	45+	
Watts Out (440 MHz)	16	26	32	35+	35+	35+	35+	35+	
Watts In	1	2	3	4	5	6	7	8	

- Works with all FM handhelds up to 7 Watts
- 45 Watts on 2 Meters/35 Watts on 440 MHz
- Auto Band Selection • Full Duplex Operation
- Single connector for dual band radios
- Reverse polarity protection
- Auto T/R Switch • "On Air" LEDs
- 5 x 1 1/2 x 5 inches • Mobile bracket

6 Meter 150W Amplifier

A-1015G
\$349⁹⁹



FCC Type Accepted - The A-1015G is the world's most popular all mode 50-52MHz FM/SSB/CW 6M amp. Built-in switchable receive preamp. 150 Watts out for 10 Watts in. For 1 to 15 Watt transceivers.

35 Watts for 2 Meter HTs

B-34G
(bottom)
\$89⁹⁹



- 35 Watts out - 2M • All Modes: FM, SSB, CW
- 18 dB GaAsFET preamp
- Reverse Polarity protect • Works w/HTs to 8 W

B-34 35W, FM only, less preamp... \$69⁹⁹

100 Watts for 2 Meter HTs

B-310G
\$179⁹⁹

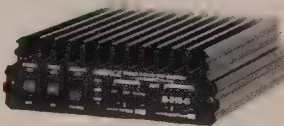


Power Curve - typical B-310-G output power									
Watts Out	25	50	75	95	100	100	100+	100+	
Watts In	1/4	1/2	1	2	4	6	7	8	

- 100 Watts out with all handhelds up to 8 Watts
- All modes: FM, SSB, CW
- Legendary MIRAGE Ruggedness
- 15 dB GaAsFET preamp
- Reverse Polarity Protection/SWR Protection

100 Watts Adjustable - HT or mobile

B-510G
\$209⁹⁹



Use any 2 Meter HT or mobile up to 50 Watts and get the same 100 Watt power output.

Low noise GaAsFET preamps

High gain ultra low noise GaAsFET preamps for improving the reception of weak signals.

Selectable gain prevents receiver overload and intermodulation. 15 to 22 dB gain. Less than 0.8 dB Noise Figure. Automatic RF switching up to 100 Watts.

Choose In-Shack model or Mast-Mount model to reduce loss. Rugged die-cast enclosures.



- KP-1/10M** 28-30MHz; in-shack model \$129⁹⁹
- KP-1/6M** 50-54MHz; in-shack model..... \$129⁹⁹
- KP-1/2M** 144-148MHz; in-shack model..... \$129⁹⁹
- KP-1/220** 220-225MHz; in-shack model \$129⁹⁹
- KP-1/440** 430-450MHz; in-shack model \$129⁹⁹

- KP-2/10M** 28-30MHz; mast-mount \$179⁹⁹
- KP-2/6M** 50-54MHz; mast-mount..... \$179⁹⁹
- KP-2/2M** 144-148MHz; mast-mount..... \$179⁹⁹
- KP-2/220** 220-225MHz; mast-mount \$179⁹⁹
- KP-2/440** 430-450MHz; mast-mount \$179⁹⁹

We now have a

SECURE web site

Order on-line at www.aesham.com

Order toll-free: 1-800-558-0411

6:00 A.M. Pacific to 8:30 P.M. Eastern
Monday - Friday • Saturday to 6:00 P.M.

VECTRONICS

... the finest amateur radio products made!



VC-300DLP
\$149⁹⁹

World's most versatile 300 Watt Antenna Tuner

You'll get everything you've ever wanted: • precise inductance control that rivals roller inductors • the ability to match any real antenna • full 1.8-30 MHz coverage • peak reading backlit Cross-Needle Meter • 8-position antenna switch • built-in 50Ω dummy load • finest components around and world class quality.

More Fine Vectronics Amateur Products

- AT-100** Tuned Active SWL Antenna \$79⁹⁹
- CK-200** Deluxe CW Keyer w/Curtis chip..... \$79⁹⁹
- DL-300M** 300 Watt Dry Dummy Load..... \$44⁹⁹
- DL-650M** 1500 Watt Dry Dummy Load..... \$74⁹⁹
- DL-2500** 2500W Dry Dummy/cooling fan... \$179⁹⁹
- VC-300M** 300 Watt Mobile Tuner \$99⁹⁹
- VC-300D** 300 Watt Tuner w/digital graph... \$179⁹⁹
- HPF-1** High Pass TVI filter 52-550 MHz..... \$24⁹⁹
- HPF-2** Deluxe high pass TVI filter..... \$29⁹⁹
- PM-30HF** 1.8-60 MHz SWR/Wattmeter \$79⁹⁹
- PM-30UV** 144/220/440MHz SWR/Wattmeter \$89⁹⁹
- LP-30** Low Pass filter, handles 1500 Watts..... \$69⁹⁹
- LP-2500** Low Pass Filter, 2500 Watts..... \$129⁹⁹
- PS-30F** 25A power supply, 30A surge ...C/O \$109⁹⁹
- PS-50F** 35A power supply, 50A surge ...C/O \$169⁹⁹

Legal Limit Roller Inductor Antenna Tuner with SSB Digital Bar Graph



HFT-1500
\$399⁹⁹

The HFT-1500 has three continuously variable components -- two 4.5 kV capacitors and a roller inductor controlled by a precision crafted crank handle and a gear-driven 5-digit counter. Tune any antenna 1.8-30 MHz, lighted D'Arsonval Cross-Needle SWR/Wattmeter, 28uH roller inductor, 4:1 2.5 kW balun and 20 segment SSB Bargraph display.

See the Price Guide for a list of Vectronics Electronic Kits



GOLDLINE

Full Range Dual Element Microphone

A dual element microphone specifically for Full-Range, Smooth Articulate SSB audio with a Wide Audio Response. The Wide Response makes it really great for FM and AM, too.

The GOLDLINE element has a wide (60Hz to 16kHz) frequency response coupled with a 6dB midrange peak @ 2kHz which gives it excellent voice articulation, which is important for clear, understandable SSB audio. At the same time, it produces a well-balanced, robust, "big bottom" low end.

When the pile-up or conditions get tough, and you need some extra punch, you can conveniently switch in an alternate element for an engineered response that provides Maximum Speech Power. The GOLDLINE comes equipped with the new Full-Range element, plus your choice of the HC-4 DX Dream Machine element or HC-5 Full Range Articulation element, described below.

The PTT features the new "Soft Touch" recessed microswitch for smooth, noise free operation. All require a CC-1 cable, listed below.

GM-4 GOLDLINE with Wide Response & HC-4 elements. **\$139.99**

GM-5 GOLDLINE with Wide Response & HC-5 elements... **\$139.99**

GM-V "VINTAGE" GOLDLINE with Wide Response, output-Z matches older Collins, Hallicrafters, Johnson, etc. AM equipment **\$159.99**

HM-10/HM-10 Dual

Hand-held Studio-style Microphones

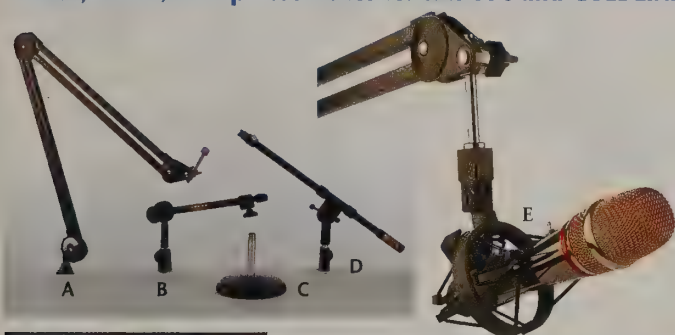
Old favorites upgraded with a new body and switch like the GOLDLINE. The HM-10 comes with your choice of the HC-5 Full Range Articulation or HC-4 DX Dream Machine element.

The HM-10 Dual contains both the HC-5 Full Range Articulation element and HC-4 DX Dream Machine cartridges, switch selectable for normal or tough conditions. Both require the CC-1 cable.

HM-10 with HC-4 or HC-5 - **\$64.99** • **HM-10 DUAL** - **\$114.99**

CC-1 Cables For GOLDLINE or HM-10's. 6-1/2 ft. long with connectors to match ICOM, KENWOOD, TEN-TEC or YAESU radios. Also wired with a 1/4 inch PTT jack to accommodate a plug from the FS-1 Footswitch or HS-1 Hand Switch. Specify Radio each **\$29.99**

Base, Boom/Clamp Assemblies for HM-10's and GOLDLINE



LX-1 Professional Studio Boom (A) Reaches 41 inches without external springs. Balanced for 1 pound microphone.... **\$94.99**

SB-1 (B) Extends from 9-1/2 to 16 inches. Posi-Lok clutch system with 52 locking teeth and "C" clamp mount keeps the microphone in place under any conditions **\$32.99**

TB-1 Table Base Mount (C) For HM-10's or GOLDLINE series microphones. Heavy (2 lb., 10 oz) cast metal base with non-skid cork feet, 6 inches high - stays put! **\$24.99**

MA-1 Boom (D) Adjustable from 6 to 24 inches and attaches to desk or shelf, or hangs from ceiling. Swivels a full 360° to place microphone right where you want it. You can use the FS-1 Footswitch or HS-1 Handswitch for PTT operation..... **\$44.99**

SM-1 Shock Mount (E) Mounts on boom, holds and isolates Goldline or HM-10 to reduce vibration pick-up **\$49.99**

HEIL MICROPHONE CARTRIDGES

If you aren't satisfied with the "sound of your station," or need better audio performance, you can solve this problem by replacing the cartridge in your microphone with a Heil Key Element for a dramatic improvement. It's tiny in size, and easily replaces existing cartridges in most microphones.

HC-5 - Full Range Articulation

The replacement microphone cartridge that eliminate the mushy, bassy, paging-type audio produced by most factory supplied microphones. It makes any rig sound better and more intelligible by providing full articulation and improved clarity. Response: 350-4000Hz, with a sharp roll-off under 300Hz and above 3100Hz, with a peak at 2100Hz. Very clear, easy-to-understand SSB audio for everyday communications that will get you lots of compliments. Cardoid pattern.

Z: 2000Ω, works with low to medium-Z inputs.
Size: 0.530"d x 0.850"w x 0.310"h **\$29.99**

HC-4 - The DX Dream Machine

The replacement microphone cartridge for HF contest, DX and weak-signal, VHF/UHF work. Produces outstanding results on aurora, backscatter, etc. Engineered to produce a high-pitched, pile-up busting 500-3800Hz response with a 10dB peak @ 2000Hz, and a sharp 12dB per octave roll off @ 500Hz. The super clarity with more punch is just the ticket for making difficult contacts. A penetrating sound, not particularly pleasing for everyday strong signal work, but otherwise - WOW!

Z: 2000Ω, works with low to medium-Z inputs.
Size: 0.530"d x 0.850"w x 0.310"h **\$29.99**

Tip: Install both the HC-4 & HC-5 and switch 'em; like on the HM-10 DUAL!

PRO-SET & PRO-MICRO Boomset Headphones

PRO-SET Boomset A rugged, lightweight boomset designed for performance and comfort during contests when wearing time is usually extended. The padded, fully adjustable headband provides maximum comfort. Heavily padded vinyl earpads seal out noise, and are removable for washing. The flexible microphone boom is adjustable to your liking and folds up for convenient storage or transport. Has a single cable wired with 1/4" stereo plug and 1/8" (3.5mm) transmit audio plug. Requires AD-1 adapter cable. Order with HC-4 DX Dream Machine or HC-5 Full Range Articulation element.. **\$130.99**

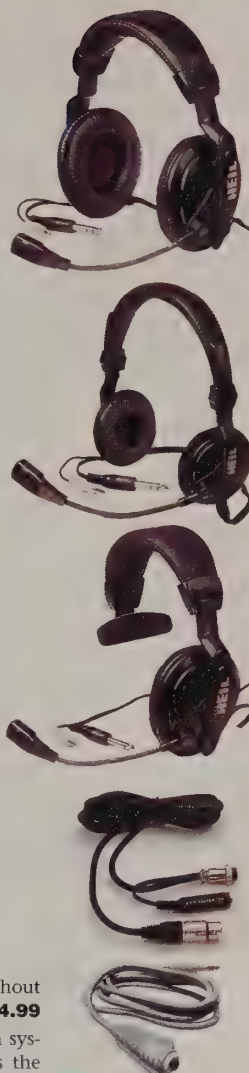
PRO-MICRO Boomset A miniature version of the PRO-SET. It's smaller and lighter weight and does not cover the entire ear which allows you to monitor your surroundings. Requires AD-1 adapter cable.

Order with HC-4 DX Dream Machine or HC-5 Full Range Articulation element.. **\$110.99**

PRO-5 Boomset If you are concerned about covering both ears and want to monitor your surroundings, the PRO-5 with its single ear phone will meet that requirement. It was created with all of the quality and performance as the PRO-SET boomset without covering the right ear. Requires AD-1 adapter cable.

Order with HC-4 DX Dream Machine or HC-5 Full Range Articulation element **\$120.99**

AD-1 Adapter cables for using PRO-SET PRO-5 or PRO-MICRO with ICOM, KENWOOD, TEN-TEC or YAESU radios. Has 1/8 inch (3.5mm) audio jack and 1/4 inch plug for FS-1 or HS-1 PTT switches.... ea. **\$16.99**



HS-1 Handswitch PTT control with 7 ft. cable and 1/4" phone plug .. **\$24.99**

FS-1 Footswitch PTT control with non-skid pads, 7 ft. cable and 1/4" phone plug..... **\$29.99**

Other HEIL Accessories



HMP In-Line FET Microphone Preamplifier For older ICOM rigs: IC-745, 751, 781, etc. that lack enough gain to accommodate Heil microphones. The HMP produces +8dB of overall gain which gives plenty of audio. Usually not necessary for late model ICOM. The 6 inch cable with 8-pin connector plugs in to the ICOM microphone input. The other end accepts the Heil CC-1 or AD-1 adapter. Operating voltage and PTT lines are derived from the ICOM mic input. The HMP-M has a modular plug for those radios with modular connector **HMP or HMP-M \$54.99**

AD-100 Microphone/Boomset Adapter Allows use of all Heil products with the YAESU FT-100. Solves the problem of multiplexed microphone, touch tone audio and control data appearing on the microphone line **\$24.99**

HD-AT Headphone adapt./6db attenu. (1/8"-1/4") **\$5.99**

XT-1 Matching Transformer A sub-miniature audio transformer for matching Low-Z microphones to High-Z inputs as found in older Collins, Drake, Hallicrafters, etc **\$15.99**

KOSS stereophones



SP/5 Sidefiring Portable Stereophone in Sport Yellow Frequency Response: 40-20,000Hz • Straight, dual entry, 4' cord w/3.5mm plug • Sensitivity: 92dB SPL/1mW • Imped: 32Ω • 0.46 oz..... **\$7.99**

HP/6 Portable Stereophone Frequency Response: 30-16,000Hz • Dynamic element for full sound • Foam ear cushions for open, hear-through sound • Durable headband adjusts for best fit • Volume control on cord for easy level adjustment • Straight, single entry, 4' cord with 3.5mm plug • Sensitivity: 91dB SPL/1mW • Impedance: 32Ω • 2.5 oz **\$9.99**

KTX/4 Lightweight, Portable Stereophone Frequency Response: 40-20,000Hz • Collapsible design for easy storage and portability • Straight, dual entry, 4' cord with 3.5/6.4mm stereo plug • Volume control on the cord for easy level adjustment • Sensitivity: 95dB SPL/1mW • Impedance: 32Ω • 2 oz. **\$14.99**

SW/5 Dynamic Microphone Headphone Single-sided, mono headphone with dynamic microphone for hands-free communications • Frequency Response: 60-20,000Hz • Microphone Impedance: 600Ω • Headphone Impedance: 32 Ω • Adjustable headband • Foam ear cushion for open, hear-through sound • Straight, single entry, 4' cord with 3.5/6.4mm plug Sensitivity: 91dB SPL/1mW • 1.5 oz **\$14.99**

SB/30 Dynamic Microphone Stereophone Stereophone with 600Ω microphone for hands-free communications • Closed, leatherette ear cushion for maximum isolation and deep bass • Frequency Response: 40-20,000Hz • Adjustable, padded headband for comfort during extended wearing periods • Straight, dual entry, 8' cord with 3.5/6.4mm Sensitivity: 100dB SPL/1mW stereo phone • Impedance: 100Ω • 9.0 oz **\$49.99**

QZ/99 Passive Noise Reduction Stereophone with Mono/Stereo Switch Frequency Response: 40-20,000Hz • Coiled, single entry, eight foot cord with 3.5mm/6.4mm plug • Sensitivity: 102dB SPL/1mW • Impedance: 60 Ω • 15 oz..... **\$59.99**

QZ/2000 Noise Reduction Stereophone Revolutionary Active Noise Reduction (ANR) stereophone system reduces harmful/annoying low frequency sounds in noisy environments • >15dB SPL from 40-200Hz; average of 10dB SPL from 30-1000Hz • Frequency Response: 15-20,000Hz • Straight, dual entry, 4' cord • Includes compact control case and collapsible stereophone for convenient travel/portability • Adjustable headband • Includes input jack for audio play-through and 2-prong adapter for in-flight use • Sensitivity: 101dB SPL/1mW • Impedance: 5kΩ • Uses 2 "AA" batteries (incl.) • 2.3 oz..... **\$179.99**



we have a

SECURE web site
at **www.aesham.com**

SHURE



526T Series II SUPER PUNCH® Transistorized Base Station Microphone Adjustable height, dynamic mic with built-in preamp and output level control. Designed to replace ceramic/dynamic, high/low impedance mics originally supplied with most equipment. 200-6,000Hz frequency response provides optimum intelligibility. Comes with 6-wire cable and triple pole double-throw locking PIT for wide range of mic to transceiver connection. Includes 9V battery..... **\$119.99**

KENWOOD

HS-5 Deluxe Headphones Specifically designed for use with communication systems. It provides natural sound and eliminates uncomfortable pressure feeling which permits long hours of fatigue free listening. To increase the volume level or when you are using the headphones in a noisy room or want privacy, replace the ear-pads with the vinyl leather ones. These are pressure-fit type ear-pads and will increase the sound pressure by about 10dB while sealing out noise. Both types are included. Includes 6 feet connecting cord with plug. Impedance: 8Ω • Maximum input: 200mW @ 1000 Hz) • Frequency Response: 150-4000kHz (-6dB) • Approx. 350g **\$79.99**



PREMIER communications



PMC-100 High Quality Desk Mic The PMC-100 desk mic features a flexible, metal gooseneck microphone for desktop use. It has both momentary and locking Push-To-Talk keys. An audio gain control is included on the mic for matching output to the radio..... **\$79.99**

SPM-100 Small Speaker/Mic

These are lightweight, compact units. Each microphone features a high-quality condenser-style mic element and high-fidelity audio circuit that produces excellent transmitted audio clarity, as well as a powerful speaker. It may be secured to the user's lapel or shoulder..... **\$21.99**



Lapel Mics The SPM-200/200E mics are the most comfortable lapel microphones on the market today!

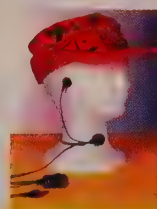
Each one features a high quality electret condenser microphone which clips to the user's lapel. The 200E series features an earphone with a patented rubber earhook.

SPM-200 **\$16.99**

SPM-200E **\$21.99**



SPM-400 Mini Boom Mics The SPM-400 headsets include an in-the-ear speaker and a rubber-covered earloop design that adjusts to comfortably fit either the right or left ear of any user. The unit features an in-line Push-To-Talk switch that can be clipped to the user's lapel or belt **\$25.99**



SPM-500 Throat Mic/Earphone The 500 series throat microphone is the answer to high noise environments. Our SPM-500 rests comfortably against the user's throat, picking up audio directly from vocal cords. This provides outstanding background noise suppression and surprising clarity... **\$37.99**

SPM-600 Full-Sized Speaker/Mic

The SPM-600 is a full-sized microphone with a super high 500 milliwatt audio output rating. The SPM-600 features a high-quality condenser mic element and has excellent transmitted audio clarity. May be secured to the user's lapel, shoulder, or belt with an adjustable clip on the back of the microphone **\$25.99**



SPM-700 Clandestine Palm Microphone

This earphone/palm microphone combo features flesh colored cord for those "low profile" communications needs. Easily concealed underneath clothing... **\$29.99**



We accept I.M.P.A.C.® Government Credit Cards



HEADSET MICS

288 Deluxe Headset Microphone™ (left) Lightweight, comfortable. Superb transmit audio – picks up your voice even at a whisper. Superb earphone tonal quality and intelligibility. The foam covered microphone element is attached to the headset with a flexible rubber extension which allows proper positioning of the microphone. The small PTT switch can be held or conveniently attached to your clothing. 6' of cord from headset to plug. 2881 works with ICOM, older Yaesu, Standard, ADI, Radio Shack and compatibles. 288K works with Kenwood and compatibles. 288Y works with Yaesu FT-10, 50 and VX transceivers ea. **\$24.99**

292Y Featherweight™ Earphone/Mic (right) An ear-plug earphone that fits comfortably in your ear. Consists of a tiny thumb size microphone with push-to-talk switch with lapel/pocket clip is built into the 4 ft. cord. The high quality dynamic earphone and electret-type microphone gives your handheld crystal clear audio on receive and transmit. Works with Yaesu FT-10R, FT-40R, FT-50R and VX series transceivers **\$17.99**



HEADPHONES

396 Professional Grade Boom Mic/Headphone (left) Designed for contesting, DXing and traffic nets. Features a *total comfort* design with superb 3/4" thick padding on each ear and headband. Super lightweight! Adjustable headband gives a perfect fit, keeps out noise. Enhanced headphone frequency response brings out speech fidelity, signals never sounded so clear. Flexible mic boom lets you position the mic comfortably at an optimum distance to minimize sibilant sounds. Tailored frequency response mic element helps bust through noise and QRM. Long, 9' cable with standard 1/4 inch jack for headphones and 3.5mm jack for microphone. Mic adapters: order 5396 Y/K/I (\$15.99 each) . **\$79.99**

392 Communications Headphones (right) Perfect for amateur radio and shortwave listening, great for all modes. Superb padded headband and ear cushion design, plus lightweight (8oz). High-performance driver units with 100Hz-24,000Hz frequency response provide enhanced sound and outstanding speech fidelity. Each earphone has individual volume and bass controls. Comes with gold-plated plug & 9' cord. *Power handling:* 450 mW *Impedance:* 16Ω at 1KHz *Sensitivity:* 102 dB/mW. Works in mono or stereo. Includes 1/4" adapter **\$19.99**



10DA-L High-Z dynamic SSB microphone head. Controlled 300-3000Hz response provides high attenuation of the unwanted sideband and better copy through interference. 2 1/8" w x 1 1/8" h x 3/8" d, 17 oz. Black. Uses T-UG9 stand, below **\$69.99**

D-104L The original "super talk power" microphone head. High output and 300-7500Hz response with rising characteristics between 500 and 4000Hz, provides maximum intelligibility. Shock proof cartridge with high-Z crystal element, metal sealed for protection. Solid machined brass parts, heavy mesh grille, all chrome plated. 3" diameter x 1 1/8" d, 14 oz. Uses the T-UG9 stand, below **\$42.99**

T-UG9 Accepts D-104L and 10DA-L microphone heads. Built-in adjustable preamp with output impedance, matches most transmitters. Side switch bar for PTT with slide-up locking clamp. 8 1/2" h without head, 5 1/2" dia. base. Chrome and grey, 6-wire coiled cable. Uses 9 volt battery **\$52.99**

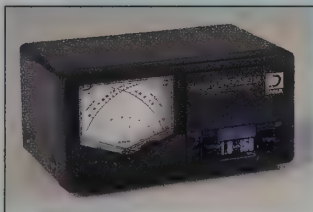
Used & Demo Equipment lists

Updated regularly on the web.
Check them out and order **On-line**



DAIWA

Professionally Engineered Cross Needle Meters Read SWR/FWD/REF Power **SIMULTANEOUSLY**



CN-100 Economy Series

Accurate and dependable
Lighted, 13.8VDC jack on rear panel

CN-101

1.8-150MHz
Power Ranges: 15/150/1.5kW

CN-103M

140-525MHz
Power Ranges: 20/200W



CN-800 Professional Series

Large, easy to read meter
Lighted, 13.8VDC jack on rear panel

CN-801H

1.8-200MHz
Power Ranges: 20/200/2kW

CN-801V

140-525MHz
Power Ranges: 20/200W

CN-801S

900-2500MHz
Power Ranges: 2/20W



CN-400 Mobile Series

Compact design with mounting bracket
Lighted, 13.8VDC

CN-410

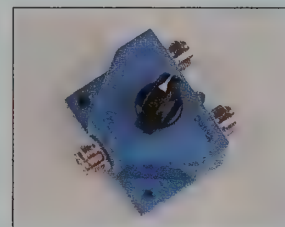
3.5-150MHz
Power Ranges: 15/150W

CN-460M

140-450MHz
Power Ranges: 15/150W

CN-465M

140-525MHz
Power Ranges: 15/75W



COAX Switches

- Patented design
- Automatic grounding of unused circuits
- Heavy-duty die cast cavity construction
- Excellent RF characteristics

CS-201

2 Position 600MHz Switch
Max Power: 2.5kW PEP/1kW CW
Conns: SO-239

CS-2016H

2 Position 2GHz Switch
Max Power: 1.5kW CW
Conns: N-Type

CS-401

4 Position 800MHz Switch
Max Power: 2.5kW PEP/1kW CW
Conns: SO-239



NCG Company

(714) 630-4541 • (800) 962-2611 • Fax: (714) 630-7024 • www.cometantenna.com

Daiwa CN-801S, CN-465M and CS-2016H are Special Order



The MFJ-259B

1.8-170 MHz SWR Analyzer™



MFJ-259B
\$239⁹⁹

plus, the MFJ-269 with
E-X-P-A-N-D-E-D Frequency
Coverage & Added Features



Analyzer Accessories

MFJ-66 \$19.99. Dip Meter Adapter. Plug a dip meter coupling coil into your MFJ SWR Analyzer™ and turn, it becomes a sensitive, accurate dip meter. Set of two covers 1.8-170MHz.

MFJ-29C \$24.99. Genuine MFJ Carrying Case. Tote the MFJ-259B anywhere with this custom carrying case. Wear it around your waist, over your shoulder, or clip it onto the tower while you work. Has back pocket for carrying dip coils, adapters and accessories. Made of special foam filled fabric to cushion blows and deflect scrapes. Protect knobs, meters and displays from harm.

MFJ-39 \$24.99. Genuine MFJ Carrying Case. Same as MFJ-29C except that it fits the MFJ-269.

MFJ-731 \$89.99. Tunable Measurement Filter™ Allows accurate SWR and impedance measurements 1.8-30 MHz in presence of strong RF fields. Has virtually no effect on measurements. Works w/all SWR analyzers.

MFJ-99 \$54.99. Accessory Package for MFJ-259B/249B/209. Includes 29C carrying case, 66 dip meter adapter, 1315 110 VAC adapter. *Save \$4.98!*

www.mfjenterprises.com

If you are serious about performance...
you Need one of these!

You've spent a lot of time and money on your antenna system, so why not make sure it's giving you top performance? An MFJ SWR Analyzer will do that – plus, it will make you very popular because all of your Ham buddies are going to try to borrow it!

The MFJ-259B is a complete Ham radio test station including – Frequency Counter, RF signal generator, SWR Analyzer™, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance and Inductance Meter and more!

Take the frustration out of getting your antennas properly tuned up for maximum performance. Gone are the days of using a conventional, sometimes questionable, SWR meter. You will no longer have to drag your rig (RF source) out into the yard. No more risking a heart attack running in and out of the house or up and down the tower to make those seemingly endless readings and adjustments.

The MFJ-259B is an all-in-one unit, with a built-in RF source so you can take it to the antenna, take one reading to get a complete picture of your antenna performance, and make all tuning adjustments on the spot.

Super EZ to use! Connect the feed line, set the bandswitch and tune the dial -- just like a transceiver. All information is clearly displayed instantly on the large, easy-to-read, 2-line LCD screen and side-by-side meters.

Read antenna SWR & Complex Impedance from 1.8-170MHz. Complex Impedance can also be read as series resistance and reactance ($R+jX$) or as magnitude (Z) and phase (degrees).

When tuning transmission lines or making up phasing harnesses for stacking antennas, you can quickly determine exact 1/4 or 1/2 wavelengths. You can also determine the velocity factor, coax cable loss in dB, length of coax and distance (in feet) to a short or open in coaxial cable.

Read SWR, return loss and reflection coefficient at any frequency, simultaneously, or inductance and capacitance at RF frequencies at a glance.

The MFJ-259B has a built-in frequency counter, Ni-Cad charger circuit, battery saver, low battery warning, and smooth reduction drive tuning.

Overall, Here's what you can do

- Find true resonant frequency of antenna.
- Trim dipoles and verticals.
- Adjust your Yagi, quad, loop and others, change antenna spacing and height. Watch SWR, resistance & reactance change instantly. You'll know exactly what to do, simply watch the display.
- Perfectly tune critical HF mobile antennas in seconds for super DX -- without subjecting your transceiver to high SWR.
- Measure your antenna's 2:1 SWR bandwidth on one band, or analyze multiband performance over the entire spectrum 1.8-170 MHz!
- Check SWR outside the ham bands without violating FCC rules.
- Take the guesswork out of building and adjusting matching networks and baluns.
- Accurately measure distance to a short or open in a failed coax. Measure length of a roll of coax, coax loss, velocity factor and impedance.
- Measure inductance and capacitance.
- Troubleshoot and measure resonant frequency and approximate Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns.
- Adjust your antenna tuner for a perfect 1:1 match without creating QRM.

Take it anywhere

Fully portable, take it up towers, to remote sites, or on DX-peditions. It uses 10 AA or Ni-Cad batteries (not included) or 110 VAC with MFJ-1315, \$14.99. Its rugged, all metal cabinet is a compact 4" x 2" x 6 3/4".

How good is the MFJ-259B?

Many manufacturers use them in their labs and on production lines -- saving thousands of dollars in instrumentation costs.

MFJ-269 SWR Analyzer™

Covers 1.8-170 MHz plus 415-470 MHz

Looks identical to and has all the features of the MFJ-259B PLUS...

- Covers 1.8 to 170 MHz plus 415 to 470 MHz
- Built-in CoaxCalculator™ -- calculates coax length in feet given coax length in electrical degrees and vice versa, and any velocity factor (great for building matching sections and phasing lines for multiple antenna set-ups).
- New 12-bit A/D converter gives much better accuracy and resolution than common 8-bit A/D converters.
- New 1.8 to 170 MHz Range features
- Read Complex Impedance as series equivalent

resistance and reactance (R_s+jX_s) or as magnitude (Z) and phase (degrees). Also reads parallel equivalent resistance and reactance (R_p+jX_p).

- Measure SWR and loss of coax with any characteristic impedance from 10 to over 600Ω, including 50, 51, 52, 53, 73, 75, 93, 95, 300, 450Ω.

415 to 470 MHz Range features

- Read SWR, return loss, reflection coefficient simultaneously, and cable loss in dB and match efficiency.
- Has LCD logarithmic SWR bargraph and SWR meter for quick tuning.
- Uses MFJ-39 Carrying Case

MFJ-269

\$319⁹⁹

SWR/POWER METERS

864 (bottom) Covers 1.8-60MHz, 144MHz and 440MHz bands. Dual sensors, connect an HF and VHF/UHF rig at the same time. Monitor SWR and power of either. Lighted cross-needle meter indicates 30/300W forward and 6/60W reflected power simultaneously. Uses 12V DC for meter light. 7 1/4" w x 2 1/2" h x 2 1/4" d **\$84.99**

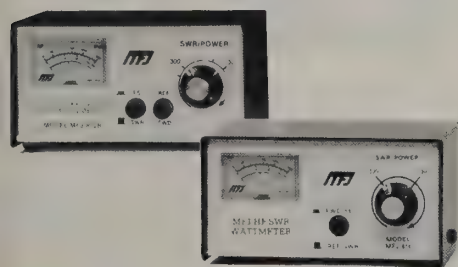
862 (middle) Similar to 864, but for 144MHz, 220 MHz and 440MHz. Ranges: 30/300W forward and 6/60 watts reflected. 5 1/4" w x 2 1/2" h x 2 1/4" d.... **\$54.99**

860 (top) Similar to the 864, but covers HF - 1.8 to 60MHz. Ranges: 30/300 watts forward and 6/60 watts reflected. 4 1/2" w x 2 1/4" h x 3" d..... **\$44.99**



815B Features large 3" cross-needle meter. Gives accurate SWR and peak or average power readings from 1.8-60MHz. Ranges: 200/ 2000W forward and 50/500W reflected. Push buttons 12V DC for meter light. 7 1/4" w x 2 1/2" h x 2 1/4" d **\$79.99**

817 Looks & features similar to 815B but covers 144 & 440MHz bands. Power Ranges: 200/20 forward and 50/5W reflected. 7 1/4" w x 2 1/2" h x 2 1/4" d... **\$89.99**



812B (top/left) Indicates forward and reflected power on 2M and 220MHz and SWR 14-220MHz, plus field-strength 1-220MHz. Ranges: 30/300W ranges. Measures only 4 1/2" w x 2 1/4" h x 3" d... **\$34.99**

816 (bottom/right) Indicates forward and reflected power from 1.8 to 30MHz. Ranges: 30/300W. Measures only 4 1/2" w x 2 1/4" h x 3" d..... **\$34.99**



844 VHF/UHF SWR/Power Meter Covers 144 and 440MHz and handles 200W. Measures SWR and Power in three ranges: 15, 60, and 200W. 50Ω impedance, SO-239 connectors. Insertion loss is 0.3 dB or less. Measures only 3 1/2" w x 3" h x 1 1/4" d. Easy to read multi-colored meter. Great to take along for those portable, HT or mobile rigs..... **\$69.99**



GrandMaster™ 3 1/4 x 1 1/4" meter, forward and reflected. Three ranges. 13.8V/110V. 7 1/2" w x 3 1/2" h x 4 1/4" d.

870 (HF Range) Covers 1.6 to 60MHz. Power ranges: 30/300/3000W **\$124.99**

872 (HF/VHF Range) Covers 1.8 to 200MHz. Power ranges: 5/20/200W **\$94.99**

873 (VHF/UHF Range) Covers 125 to 525MHz. Power ranges: 5/20/200W **\$104.99**

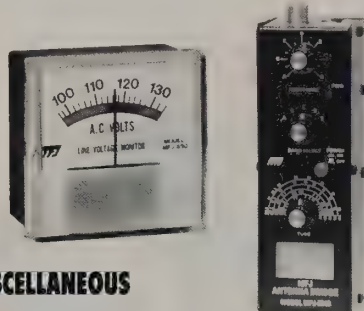
874 (HF/VHF/UHF Range) Covers 1.8 to 525MHz. Power ranges: 5/20/200W **\$159.99**



FIELD STRENGTH METERS

801 Super Compact Field Strength Meter (right) You can read relative field strength from your antenna, measure antenna performance and discover how strong your antenna field is. Its super compact size fits in the palm of your hand, only 2 1/2" w x 3 1/2" h x 1" d. Telescopic whip included **\$19.99**

802 Bipolar Field Strength Meter (left) Dual whips are included, 2 1/2" w x 4" h x 1 1/2" d **\$39.99**

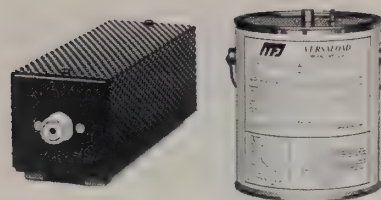


MISCELLANEOUS

850 Line Voltage Monitor (left) Plug into any 110V AC outlet and monitor the line voltage on an expanded/colored 95 to 135V AC scale. Measures 2 1/4" w x 2 1/4" h x 1 1/2" d..... **\$19.99**

204B Antenna Bridge (right) Quickly optimize 1.8-30MHz antennas for peak performance. Portable - take it to an antenna site. Determine if an antenna is too long or too short, measure resonate frequency and resistance to 500Ω. Built-in resistance bridge, null meter and tunable oscillator-driver. Requires 9V battery. Measures 4" h x 2" w x 2" d **\$79.99**

224 2M FM SignalAnalyzer™ Measure signal strength over 60dB range; check and set FM deviation, measure antenna gain, beamwidth, front-to-back ratio, sidelobes, feed-line loss. Plot field strength patterns, position antenna, measure preamp gain, tune transmitters and filters. Use scope to analyze modulation wave forms, measure audio distortion, noise and peak deviation. Covers 143.5-148.5MHz. Head-phone jack, battery (9V) check function. 4" x 2 1/2" x 6 1/2" **\$149.99**



DUMMY LOADS (OIL FILLED)

250 Versaload (right) 50Ω oil-filled dummy load providing low VSWR to 400 MHz. Rated at 1 KW CW or 2KW PEP for 10 min., with 50% power rating for 20 minutes and 200W CW (400W PEP) continuous. 7 1/4" h x 6 1/2" diameter **With oil \$59.99**

250X Same as above, but requires oil **\$39.99**

(DRY LOADS)

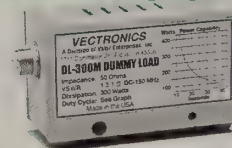
(left) Air cooled, non-inductive 50Ω resistor mounted in a metal housing. Full rated load for 30 seconds with derating curve to 5 minutes.

260C (HF/VHF) Rated at 300W. 1:1 SWR to 30MHz, .5:1 to 650MHz. 2 1/2" x 2 1/2" x 7" **\$34.99**

260CN With type "N" connectors **\$39.99**

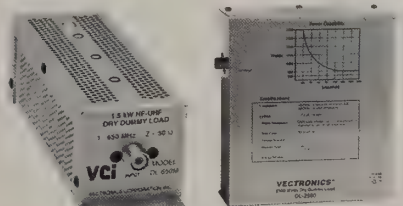
264 (UHF) Performs from 1.3 to 650MHz, usable to 750MHz. Rated at 1.5KW for 10-seconds and 100W for 10-minutes. 3" w x 3" h x 9" d **\$69.99**

VECTRONICS



DUMMY LOADS

DL-300M Dry Dummy Load Simulates an accurate 50Ω antenna up to 150MHz. Test or tune up your transmitter without radiating a signal on the air. Power handling curve rated at 300W for 15 seconds, to 100W for 40 seconds. VSWR <1.3:1 at 150MHz. 5" h x 2" d x 2 1/2" h, 8 oz **\$44.99**



DL-650M Dry Dummy Load (left) Good all the way up to 650MHz. Power handling curve is rated at 1500W for 10-seconds, down to 100W for 10 minutes. VSWR <1.3:1 at 500MHz..... **\$74.99**

DL-2500 Dry load (High-Power) (right) A fan cooled heavy-duty load for up to 150MHz. Power handling curve rated at 2500W for 1 minute, down to 500W for 10 minutes **\$179.99**

SWR/POWER METERS

PM-30HF Similar to pic. RMS or PEP forward and reflected power and SWR simultaneously. Lighted cross-needle meter. Covers 1.8-60MHz, 300/3000W ranges. 5 1/2" w x 3 1/2" h x 5 1/4" d, 1.2 lbs **\$79.99**

PM-30UV (shown) Same features as the PM-30HF, but covers 144, 220 and 450MHz bands **\$89.99**





RF DIRECTIONAL WATTMETERS

81000-A RF Directional Wattmeter Accurate RF Power measurement in 50Ω coaxial systems. Uses an internal line section and a "Quick Match" plug in elements in the range of 0.1-10,000 watts full scale, and from 0.45 to 2300 MHz.

Simply plug in the appropriate measuring element and select forward or reflected direction. Measured average RF power is indicated directly on the large 4-1/2 inch "taut-band" meter with three scale display. The meter is also mirrored and shock mounted to provide the most reliable and accurate readings.

Strong shock-proof housing. Supplied with SO-239 connectors (Type-N female Special Order) **\$248.99**

83000-A RF Peak Reading Wattmeter Similar in appearance and operation to the standard Model 81000-A wattmeter. Contains an amplifier which allows measuring of both Average and Peak Envelope Power (PEP) with the flip of a switch. Internal 9V battery is required and supplied for peak reading mode..... **\$374.99**

STANDARD PLUG-IN ELEMENTS

82004 2 to 30MHz; 50W	\$83.99
82005 2 to 30MHz; 100W	83.99
82006 2 to 30MHz; 250W	83.99
82007 2 to 30MHz; 500W	83.99
82008 2 to 30MHz; 1000W	83.99
82009 2 to 30MHz; 2500W	119.99
82010 2 to 30MHz; 5000W	119.99
82013 25 to 60MHz; 10W	68.99
82014 25 to 60MHz; 25W	68.99
82015 25 to 60MHz; 50W	68.99
82016 25 to 60MHz; 100W	68.99
82029 100 to 250MHz; 10W	68.99
82031 100 to 250MHz; 50W	68.99
82033 100 to 250MHz; 250W	68.99
82046 400 to 1000MHz; 10W	68.99
82048 400 to 1000MHz; 50W	68.99
82049 400 to 1000MHz; 100W	68.99

ACCESSORIES

88000 Type-N female "QM" connector	\$9.99
88800 Carrying case	45.99



We accept I.M.P.A.C.® Government Credit Cards

Bel MERIT



DX-405 Multi-function Multimeter (left) 10 functions/39 ranges • 3½ digit, manual ranging • Frequency meter, to 20MHz • 0.25% DCV basic accuracy • Measure voltage, current, resistance and diode • Continuous beeper • Data hold • Auto power off • Input warning • Tilt stand with lead holder • Holster • 4" w x 7.5" h x 1.5" d, 1.5 lb..... **\$69.99**

DX-355 Digital Multimeter (middle) Designed for industrial heavy-duty (all current range fused) extensive overload protection • 0.25% DCV basic accuracy • Measure voltage, current, resistance, diode and freq. up to 20MHz • True RMS reading • Data hold • Auto Off • Tilt stand with lead holder • Protective holster • 4" w x 7.5" h x 1.5" d, 1.5 lbs..... **\$74.99**

DM-80 Pocket Digital Multimeter (right) 3200 count • 32 segment bargraph • Auto/manual ranging • Auto power off • Data hold • Range • Voltage, AC/DC 450V • Current, AC/DC 300mA • Resistance, 30MΩ • Diode test • Continuity beeper • Over range indication • Low batt. mark auto polarity • Carrying case incl. • 2" w x 4.1" h x 0.4" d, 3.2 oz..... **\$34.99**

DIAMOND ANTENNA



SWR/POWER METERS

(left) Five models measure power and SWR with 5-10% of F.S. accuracy. Illuminated meter, sensor switch, LED indicator. Power ratings for intermittent operation. For continuous, ratings vary with frequency. SO-239 connectors on all except SX-1000 (type-N). 6" w x 2½" h x 4" d, 2 lbs.

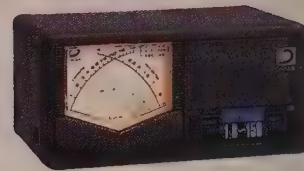
SX-100 1.6-60MHz, 30/300/3kW PEP	\$134.99
SX-200 1.8-200MHz, 5/20/200W PEP	\$94.99
SX-400 140-525MHz, 5/20/200W PEP ...	\$114.99
SX-600 Dual band, 1.8-160MHz and 140-525MHz, 5/20/200W PEP ranges	\$169.99
SX-1000 Dual band, 1.8-160MHz and 430-1300MHz, 5/20/200W PEP ranges	\$214.99

CROSS-NEEDLE SWR/POWER METERS

(right) Indicate forward and reflected power and SWR simultaneously. 50Ω impedance, SO-239 connectors, 10% F.S. accuracy, 3.3" w x 3.4" h x 3.7" d, 9 oz.

SX-20C 3.5-30/50-54 & 130-150MHz ranges; 30/300W. Needs 5W minimum for VSWR ..	\$89.99
SX-40C 144-470 MHz (220 MHz with correction factor); 15/150W (3W minimum power)	\$79.99

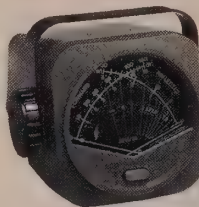
DAIWA Industry Co. Ltd.



CROSS NEEDLE SWR/POWER METERS

CN-101 Covers 1.8 to 150MHz, rated at 1500W from 1.8-60MHz and up to 1000W at 144MHz. Shows Forward and Reverse power and VSWR simultaneously. Three Power Ranges: 15/150/1500W (RMS or PEP); ±10% of full scale accuracy. SWR detection sensitivity: 4W minimum. 50Ω impedance, SO-239 connectors. 6" w x 3" h x 3¾" d, 1½ lbs **\$99.99**

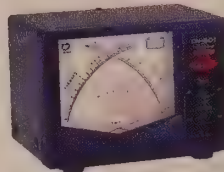
CN-103M Same as CN-101, but covers 140-525MHz and rated at 200W. Two Power Ranges: 20/200W (RMS or PEP)..... **\$99.99**



CN-410M Compact Meter

For mobile or base use - covers 3.5-150MHz. Two power ranges: 15/150W forward and 50/SW reflected. Backlit meter shows forward and reverse power and VSWR simultaneously. SWR detection sensitivity: 3W mini. 50Ω impedance, SO-239 connectors. Mounting bracket included. 2¼" x 3" d x 3" h, 10 oz..... **\$124.99**

CN-460M Compact Meter Same as CN-410M, but covers 140-450MHz **\$124.99**



PROFESSIONAL SERIES

The CN-801 series of cross needle meters features the most accurate meter and largest meter face in the Daiwa line.

The large, easy-to-read meter has .5W increments and is lighted. This is truly a professional quality meter. • 5W SWR detection sensitivity (min.) • 50Ω impedance • 6" l x 4" h x 4¾" w • 2.2lbs

CN-801H 1.8-200MHz, 20/200/2kW **\$149.99**

CN-801V 140-525MHz, 20/200W **\$154.99**

CN-801S 900-2500MHz, 2/20W, Type-N Special Order **\$239.99**

MFJ

MFJ ENTERPRISES, INC.



854 RF Current Meter A top-mounted sense coil snaps over wires and cables, etc. up to 1/2" diameter • Measures actual RF currents in antenna elements, radials, ground wires and on the outside of coax feedlines • Six ranges, 30mA to 3A • Accurate from 1-30MHz • Range with variable sensitivity control, allows tracking down RFI-causing current on household wiring and cables • Press-to-test power circuit turns unit off automatically after 15 seconds to provide long battery life • Built-to-last, sturdy all-aluminum case and G-10 PC board • 2.5" w x 5.5" h x 1.5" d, 11 oz..... **\$89.99**



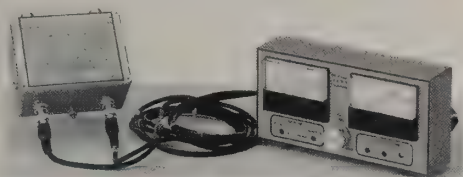
RF Applications, Inc. www.rfapps.com

Affordable...
High Performance & High Quality RF Power Measurement Systems



P-3000 HF Power and VSWR Indicator

Microprocessor based for fast, accurate power & VSWR readings from 1.8-30MHz & 15-2950 watts - without adjustments or calibration. Three separate instruments in One: Peak Digital Power Display, VSWR Display w/Alarms and 10-LED Instantaneous Power Bargraph. During high VSWR conditions a relay can interrupt the control line to linear to reduce chance of damage. Separate remote directional coupler locates up to 6' away. 50Ω input and output, SO-239 conn. Requires 12V DC @ 250mA. Display: 6" w x 5" h x 2" d; Coupler: 4" w x 3" h x 2" d, 6 lbs total. (5000W version also available by Special Order) **\$299.99**



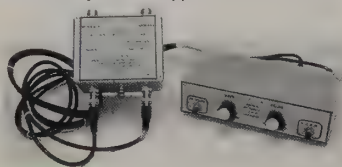
P-2000A RF Power & VSWR Indicator

For HF applications from 1.8-30MHz & up to 2000W RF output. It has an adjustable meter response time and uses the same remote coupler as the P-3000 unit. An adjustable VSWR setting and a relay are provided that can be used to automatically disable an amplifier under high VSWR conditions. Display: 8" w x 4" h x 2" d; Coupler: 4" w x 3" h x 2" d. (5000W version also available by Special Order) **\$299.99**



VFD Wattmeters

Features a 2 line by 16 character vacuum fluorescent display, tuning and operate modes and a settable VSWR limit. Provides real time peak and hold display of your actual power and VSWR every transmission. The 65 element bargraph gives you better resolution than a meter, and you can select a quick update for the displayed power. The sensor uses large cores that will not saturate. This unit also features a settable alarm indication to let you know that the VSWR has exceeded a preset limit. Display: 5" w x 3" h x 2" d. Coupler: 4" w x 3" h x 2" d. **VFD-HF** 1.8 to 30MHz, 15 to 2955W **\$249.99**
VFD-VHF 50 to 225MHz, 5 to 300W **\$249.99**
Vanity option, VSWR alarm relay, and power monitor options are available directly from RF Applications at additional cost.



P-2000CW RF Power/VSWR Indicator

Uses an audible Morse Code interface to report the values of forward and reflected power. The values are stored during and at the end of each transmission and can be reported via CW while on the air or after the transmission. If the VSWR exceeds a preset value, the operator is alerted with the Morse "V" character, and a relay can provide control to disable an amplifier, etc. Covers 1.8-30 MHz and is rated 5W to 2000KW. 12V DC. **Closeout \$189.99**

MIRAGE

Three models all measure RMS, peak forward and reverse power and SWR, directly without charts or calculations. Negligible insertion loss. Removable coupler, SO-239 connectors. Requires 9V battery, or AC adapter. Low battery indicator. 5" w x 4" h x 5" d, 3 1/2 lbs.

MP-1 1.8-30MHz; 25, 200, 2KW PEP **\$219.99**
MP-2 50-200MHz; 50, 500, 1.5KW PEP .. **\$219.99**
MP-3 420-450MHz; 5, 50, 150W PEP **\$249.99**



LOW COST METERS

SWR-1 Field Strength or SWR Meter (left) Range: 3.5 to 150 MHz; Impedance: 52Ω; SWR: 1:1-3:1; Accuracy: 5%; Meter Sensitivity: 300uA. 5" RF pick-up antenna. 6" w x 2" w x 2" d, 14 oz. **\$19.99**

SWR-3 SWR Meter (right) Range: 1.7-30MHz • Impedance: 50-52Ω • SWR: 1:1-3:1 • Accuracy: 5% • Sensitivity: 300uA • 2 1/2" x 3 1/2" x 3", 6oz **\$14.99**

370052 Multi-Meter, Capacity Checker, Temperature Meter 3 1/2 digits • 1/2" h LCD • DC volts - 200mV, 2000mV, 20V, 200V, 1000V • AC volts - 200V, 750V • DC current - 200uA, 2000uA, 20mA, 200mA, 10A • Resistance - 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ • Capacity - 2000pf, 2nf, 200nf, 2uf, 20uf • Diode test • Transistor hfe • Test leads & 9V battery • 2.6" w x 4.8" h x 1" d ... **\$19.99**



The Original "Bug", c. 1904, is still manufactured today using tools and dies similar to those used by its inventor, Horace G. Martin. Designed for code speeds of 20-50+ wpm.

Standard model: Painted base and chrome top parts; **Deluxe model:** Polished chrome base and top parts with fine jewel movements for smooth operation; **Presentation model:** Polished chrome base and 24K gold-plated base plate and chrome top parts, fine jewel movements; **Gold model:** Gold-plated base, chrome top parts.

110 Standard **\$159.99**
105 Deluxe **\$199.99**
100 Presentation **\$269.99**
090 Gold **\$299.99**



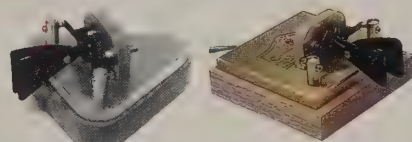
Vibrokeyers: Single lever paddle (left) initiates automatic dots and dashes of an electronic keyer. Iambic model (right) allows automatic dot/dash insertion. **Standard:** black base, chrome parts; **Deluxe:** chrome base and top parts with jeweled movements; **Presentation:** iambic only, 24K gold-plated base and top parts with jeweled movements; **Gold:** 24K gold-plated base and top parts with jeweled movements.

Vibrokeyer

120 Standard **\$139.99**
115 Deluxe **\$179.99**
113 Gold **\$269.99**

Iambic

135 Standard **\$139.99**
130 Deluxe **\$179.99**
125 Presentation **\$239.99**
123 Gold **\$269.99**



145 Brass Racer Iambic Solid Iambic paddle mounted on a polished hardwood base **\$99.99**
150 Square Brass Racer Solid lacquered brass iambic paddle mounted on a polished hardwood base. Magnetic action, no springs. **\$139.99**



Straight Keys - Unique mechanical action, unlike any straight key ever manufactured.

155 Standard **\$139.99**
160 Deluxe **\$179.99**
153 Gold **\$269.99**

Deluxe Double Keys - Choice of iambic and straight or vibrokeyer and straight key. Double keys allow you to instantly switch from using an electronic keyer to the personal touch of a straight key.

165 Straight key/Iambic **\$319.99**
170 Straight key/Vibrokeyer **\$319.99**

YAesu



YS-60 Monitors average (CW) and peak (SSB) transmitter power and VSWR. Covers 1.6 to 60MHz, up to 2KW. Ranges: 0/200 & 2000W PEP. 50Ω imped., SO-239 connectors. Requires 12V DC for lamps & internal circuits. 4 1/2" w x 2 1/2" h x 3 1/2" d, 1 1/2 lbs. **\$129.99**

YS-500 Similar to YS-60, but covers 140-525MHz and has 4/20 & 200W PEP ranges **\$109.99**





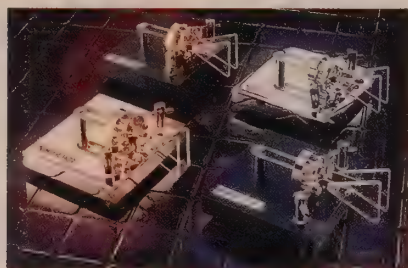
OCM-2 Combination Code Practice Oscillator and CW Monitor Volume control, 3" speaker, and headphone terminals. Requires a code key and a 9V battery..... **Kit \$19.99 Wired \$24.99**



K-1 (left) Low-cost general purpose key w/phenolic base, adjustable tension & contact spacing. **\$10.95**

K-4 (right) Deluxe high quality key. Polished brass base, shorting bar..... **\$16.95**

BENCHER, INC.



AFFORDABLE STANDARD
for CW operators world-wide

IAMBIC & SINGLE LEVEL PADDLES

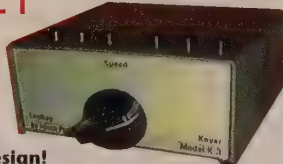
BY-1 Black base..... **\$99.99**
BY-2 Chrome..... **\$119.99**
BY-3 Gold..... **\$279.99**
BY-4 Black and gold..... **\$169.99**

www.bencher.com

LOGIKEY IDIOM Press

www.qth.com/idiom

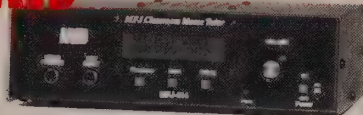
Full featured
version of the
famous Super
CMOS III keyer design!



K-3 Non-volatile mem. • 6 editable messages, 1,530 characters • Messages can include programmed functions like automatic contest numbers, speed changes and pauses • Message can allow paddle inserted text & loop for continuous replay • Linear speed control - 5-60 WPM • Adjustable weighting and monitor tone • Tune function • Auto character spacing if desired • Can emulate other keyers, including Curtis "A" timing • Ultra Speed Mode for messages up to 99 WPM • Contest serial numbers 001-9999, with push button decrement • Beacon capability • Full compensation for QSK rig timing • Keys solid-state or grid-blocked tube rigs • 12V DC, < 0.1 amp • 4 1/4" w x 2 1/4" h x 4 1/4" d..... **\$119.99**

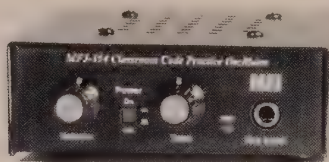
HK-3 Hook-up kit for the K3 Includes Paddle-to-Keyer cordset; RCA-to-RCA keyer output cable and 2.5 mm DC power plug cordset for 12V **\$10.99**

MFJ ENTERPRISES, INC.



FOR LEARNING/PRACTICING CODE

414 Professional Classroom Tutor Features include LCD readout, printer port and audio tape recording output. Build and save three custom sets (16 characters each) for extra practice. Or combine these to give you 48 characters for using the KOCH method. Customize random words for practice, too. Use with 144/440MHz FM HT or HF transceiver for on-air code practice. VECs can give up to 16 exams. Full-featured memory keyer - has 1000 character memory, semi/auto modes, iambic A/B, reverse paddle, change speed and tone on-the-fly. Practice sending into the MFJ-414 with iambic paddle or straight key. Use built-in or external speaker or headphones. Includes serial port cable and open-end patch cable. 12 VDC or 110 VAC. 8 1/2" w x 2 1/4" h x 6" d.. **\$189.99**



554 Code Practice Oscillator Designed for classroom use and abuse with great sound that enhances learning of Morse code. Plenty of volume from a built-in 1W amp and 3" speaker. Volume control and adjustable tone control (400 to 1000Hz). On/Off switch, power ON LED, 1/4" key jack, 3.5mm external speaker jack and DC input jack. Requires 12V DC. All-metal enclosure. 4 1/4" x 1 1/2" h x 5" d.. **\$79.99**

550 Telegraph Key..... **\$7.99**



AIDED CW SENDING/RECEIVING

452 Super CW Keyboard (left) A stand alone CW keyboard that includes an RFI suppressed keyboard, a two line 16-character non-volatile LCD display. Send effortless CW by just typing the characters as you see what you are sending on the display. No computer to boot up, no program to load. • Speed: 5-100WPM • Weight: 5-95% • Sidetone: 300-3000 Hz sidetone • Serial Numbers (0-9999) • Has buffer and memory full audible indicators. Keys solid state and tube-type rigs. Requires 12VDC or 110 VAC with MFJ-1312B (\$14.99) **\$129.99**

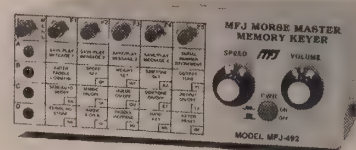
462B MultiReader™ (right) Supply this unit with audio from your receiver or transceiver; tune in CW, RTTY, ASCII or AMTOR (FEC) signals; and read the automatically decoded text directly from the 2-line, 16-character LCD display. • Copy most standard shifts and speeds in all modes • AutoTrak™ feature helps track and decode high speed CW • 8K memory stores several pages • PLL modem technology digs out weak signals • Precision tuning indicator • Printer port • 6 1/4" w x 2 1/2" h x 6 1/4" d • Requires 12VDC or 110 VAC with MFJ-1312B (\$14.99)..... **\$169.99**



KEYERS

407D Deluxe Electronic Keyer Features dot-dash mem., self completing dots and dashes; jam-proof spacing. RF proof, instant start. Single squeeze, or straight key. Front panel controls: speed, weight, tone & volume, ON/OFF, tune, auto or semi-automatic. Selectable A or B-type iambic keying. Built-in speaker, uses 9V battery or MFJ-1312B AC adapter. 7" w x 2" h x 6" d **\$69.99**

401D Econo Electronic Keyer II Similar to MFJ-407D but with external speed and volume controls, internal weight and tune controls. Uses 9V battery or MFJ 1312 AC adapter **\$49.99**



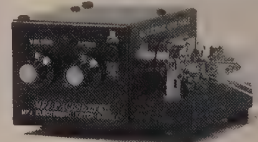
492 Menu Driven Memory Keyer No complex sequences. Save messages, enter iambic, semi-auto, handkey, message queue, paddle modes. Select iambic A/B, Morse trainer, store starting serial numbers. Holds 192 characters in 4 memories (expandable to 8K+ characters in 8 memories. Front panel speed control (5-100 WPM) and volume control for sidetone speaker. Direct and grid block keying. 9V battery or 110V AC adapter. 6 1/2" x 2 1/2" x 6 1/4". **\$89.99**

493 All features of the 492, but with 32K memory IBM keyboard input, serial port for computer interface and QSO simulator..... **\$129.99**

451 Morse Keyboard Stand-alone CW keyboard with 200 character type-ahead buffer, and two 100 character messages. Requires 12VDC or MFJ-1312B 110VAC adapter **\$99.99**

452 Morse Keyboard with 16 character LCD display. Comes with keyboard **\$129.99**

422D Keyer-Paddle Combo Keyer unit installs on top of Benchers iambic paddle. Uses Curtis™ chip. 9 to 50 wpm.



Adjustable weight and tone, dot-dash memory and sidetone. Semi-automatic and tune or auto modes. Keys grid block, cathode or solid state. Uses 9V battery or AC adapter. 4 1/4" x 2 1/2" x 5 1/2" d..... **\$154.99**

422DX Keyer only..... **\$79.99**

UM Unified
Microsystems

XT-4 CW Memory Keyer Designed for QRP, Field Day, mobile CW county hunting - any portable operation. Also goes well in the shack with smaller rigs. 8-45 WPM. **Memories:** 4 with 100 Morse characters each positive keying output only via RCA phono jack output. 1/8" (3.5mm) stereo jack input. Paddle reverse for left or right-hand operation. Auto power save mode w/flashing LED engages after 30 min. of inactivity. Requires 9V alkaline battery **\$69.99**



KC-4 Cable set for XT-4 **\$9.99**



K-COM

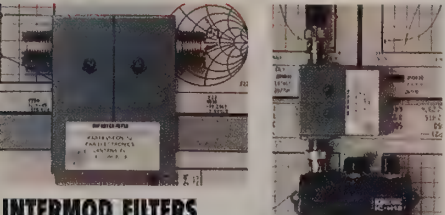


TELEPHONE RF INTERFERENCE FILTERS

Cure telephone RF interference in the most irritating cases even when dealing with transmitters with full legal power output. Use any number of filters with no adverse effect on telephone performance.

- RF-1** For single line equipment including wired and cordless phones, answering/fax machines, modems, etc. Uses standard modular connectors..... **\$16.99**
- RF-1/2-LINE** For 2-line or multi-line, multi-station electronic key phone systems **\$22.99**
- RF-1/COILED** For use when RFI enters thru coiled telephone cord between base and handset. **\$22.99**
- RF-2** Hard-wired, provides a wide range of installations optional to add RFI rejection at a variety of physical/electrical locations in the system; inside jacks, behind wall mounts, etc **\$10.99**

PAR ELECTRONICS



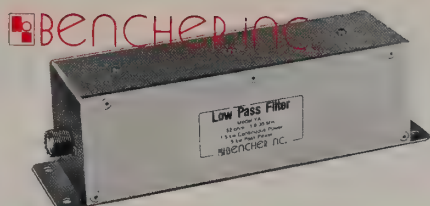
INTERMOD FILTERS

Solve most intermod or front end overload problems from paging systems, etc. with these asymmetrical, 45-54dB notch filters. Centered on the offending pager spectrum of 152-153MHz, they work effectively with a loss of ≤ 0.5 dB and a 1.25:1 VSWR. Works with dualbanders by providing a low-loss pass-thru of 70cm signals.

- VHFDN152** 2m base/mobile intermod filter, rated 50W, SO-239 connectors, 2" h x 1" d x 2 1/2" w. **\$62.99**
- VHFTN152-158** Triple Cavity Similar to the VHFDN152 except it places a second notch in the 158MHz pager band in addition to the dual notch in the 152 MHz band. 2 1/2" h x 1" d x 3" w..... **\$82.99**
- VHFDN152HT** 2m intermod filter for handhelds BNC connectors, 20W. 1 1/2" h x 3/4" d x 2" w... **\$68.99**
- UHFDN450** UHF intermod filter for base or mobile. Blocks pagers & two-way transmitters that cause 70cm intermod; transparent to 2m .. **\$62.99**
- UHF-12** 12" Belden RG-58/U jumper cable with silver/gold/teflon PL-259's on each end **\$9.99**



020-001 Low Pass Filter Install between transmitter and antenna to reduce or eliminate TVI caused by harmonics from transmitters operating from 1.8 to 30MHz. Rated 2KW, 5KW SSB peak. Over -65dB attenuation above 57MHz. SO-239 connectors..... **\$56.99**



The Best General Purpose Low Pass Filter Available

Check the specs!

YA1 1kW, 80db attenuation @ 50MHz..... **\$75.99**

www.bencher.com



IntermodFighter™ Eliminate intermod in your 2M HT or mobile station. Three high-Q bandpass filters and two L-sections give razor sharp selectivity to knock out Interfering signals below and above 2M.

- 713** Has BNC connectors for use HTs. Self-contained, and uses a 9-volt battery. To eliminate intermodulation, remove the rubber duck and replace it with the MFJ-713. Re-install the duck - no more intermod! RF tight, rugged aluminum case. **\$59.99**
- 714** For mobiles - install between rig and antenna. SO-239, requires 12V DC..... **Closeout \$49.99**

704 50Ω Low Pass Filter Install between HF transmitter and antenna to reduces TVI from harmonics that fall in the TV band. Handles 1kW from 1.8 to 30MHz **\$49.99**

711 75Ω High Pass Filter Install at TV or VCR antenna input to reduce or eliminate interference from HF transmitters operating up to 30MHz..... **\$24.99**



HI-Q Common-Mode™ Filters For tough RFI problems. Lowpass filters eliminate harmonic-type interference but are not capable of filtering out "Common-Mode" (differential noise energy transfer between transmitter and ground including stray capacitance). For cleaner signals, add an RF Inquiry filter.

- Operating Frequency: 1.8-70MHz • Common Mode Attenuation: -50 to -60db below 250MHz
- Insertion Loss: Less than 0.1dB • Impedance: 50Ω
- Connectors: SO-239 teflon

- CF250E-UHF** 250W, .98 x 10 in. 0.5 lb... **\$89.99**
- CF5KV-UHF** 5kW, 2.1 x 12.6 in., 1.3 lb **\$124.99**

we have a **SECURE** web site at www.aesham.com

DCI DIGITAL COMMUNICATIONS



BANDPASS FILTERS

Install between your 2m, 220 or 440MHz rig and antenna to reduce strength of out-of-band interfering signals while allowing signals you want to hear to pass through at full strength. Eliminate random squeals, squawks, beeps and strange voices from your UHF or VHF radio caused by intermodulation from strong, nearby pagers, police radio, etc. Also effectively reduces spurious emissions on transmit.

- Hear desired signals even in crowded urban centers with high-powered commercial systems
- Design: 2M/220MHz - four helical resonators with aperture coupling; 440MHz - four 1/4-wave linear resonators with aperture coupling • VSWR 1.5:1
- 200W rating • Made of extruded aluminum, copper and brass • 12w"x 3"h x 5"d • 2 lb, 11oz

146-4H Passband: 144-148; Loss <1 dB; Selectivity: -57dB @ 136MHz and -43dB @ 156MHz. SO-239 silver-teflon connectors **\$89.99**

145-2H Passband 144 to 146 MHz **\$89.99**

223.5-3H Passband: 222 to 225MHz; Loss 1 dB; Selectivity: -33dB at 233 3MHz and -28dB at 233 MHz. SO-239 silver-teflon connectors **\$89.99**

445-10C Passband: 440-450MHz; Loss 1dB; Typical selectivity: -47dB at 425MHz and -50dB at 456 MHz. Type-N silver-teflon-gold connectors **\$109.99**

435-10C Passband 430 to 440MHz **\$109.99**

Upgrade to type-N connectors on 2m and 220MHz models - add \$10 to price; Special Order



High Pass Filters Stop TV, FM and VCR interference caused by harmonics or overload from HF amateur radio transmissions, etc. Installs at TV or VCR antenna terminals or connector. Sharp frequency cutoff at 52MHz with 70dB attenuation below 50MHz.

HP-300T (300Ω) or **HP-75T** (75Ω) ea. **\$12.99**

VECTRONICS®



LP-30 (right) Low Pass Filter Suppress TV interference from HF transmitters. Use between transmitter and antenna or tuner. Up to -70dB attenuation of harmonics falling in TV bands. For 52Ω, up to 30MHz and 1500W RF continuous power .. **\$69.99**

LP-2500 Rated for 2.5KW continuous ... **\$129.99**

HPF-1 (left) High Pass Filter Install at TV antenna terminals. Stops interference caused by overload and harmonics from HF transmitters operating below 30MHz. High harmonic attenuation but low loss in the 52-550MHz TV passband. For 300Ω, but baluns and Type-F connector are supplied for 75Ω **\$24.99**



License Study Materials



Earning your Amateur Radio license or upgrade...as easy as

1-2-3! Each ARRL License Manual includes the theory and rules you need to pass your tests. The entire question pools are included, with correct answers.

Step 1

Technician Class

Exam:

- 35-question Technician test (Element 2)
- No Morse Code Exam

Now You're Talking!—4th edition. Amateur Radio's most popular **FIRST** license manual..... **ARR 235 \$19**

ARRL's Tech Q&A—2nd edition. Review from the entire Technician question pool. Brief explanations follow each question. Quick & Easy!..... **ARR 315 \$12.95**

Step 2

General Class (upgrade from Technician)

Exams:

- 35-question General test (Element 3)
- 5 WPM Morse code test (Element 1)

ARRL General Class License Manual—4th edition **ARR 169 \$15**

Your Introduction to Morse Code. Pass the 5 WPM code test.
cassettes **ARR 195 \$12**
audio CDs **ARR 192 \$14**

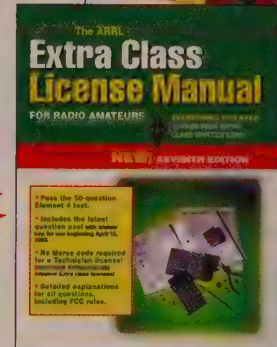
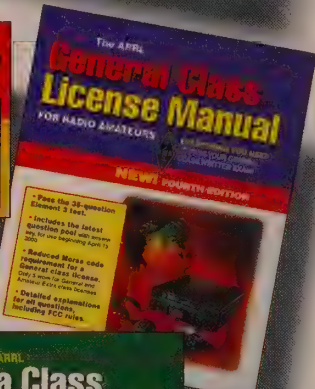
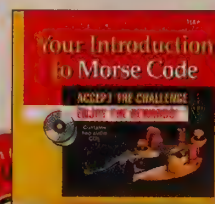
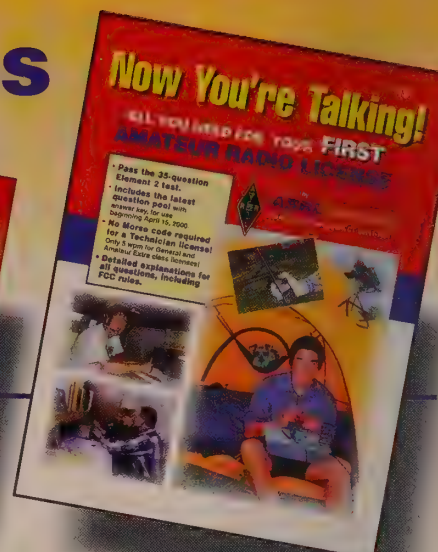
Step 3

Extra Class (upgrade from General)

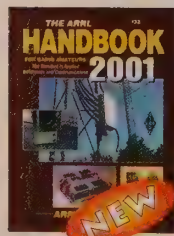
Exam:

- 50-question Extra test (Element 4)

ARRL Extra Class License Manual—7th edition **ARR 155 \$19**



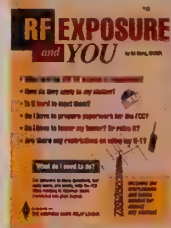
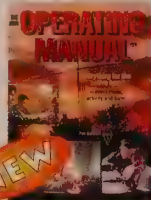
GENERAL



2001 Radio Amateur's Handbook, 78th edition
Softcover 1200+ pages translates theory into practice through a variety of hands-on projects. Among the new material is a chapter on digital signal processing & a remote controlled antenna switch. **ARR 099 \$32**

Operating Manual

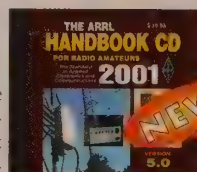
The best one-stop book of operating information that is available..... **ARR 241 \$25**



ARRL RF Exposure & You
Explains how to meet the FCC requirements using tables, graphs and worksheets to guide you through the process. If it turns out you aren't meeting new requirements, this book suggests what to do..... **ARR 258 \$15**

2001 Radio Amateur's Handbook CD 5.0

Complete text of the 2001 Handbook • Enhanced image viewer with auto-sizing feature and thumbnail print preview allowing easy adjustments • Template packages as PDF files and Acrobat Reader included to allow viewing/printing • "Search the Index" feature allows you to type a word and see matches • URLs in text launch your browser • Microsoft Windows required **ARR 102 \$39.95**



ARRL RFI Book
318 pages of step-by-step interference solutions covering: telephones, power lines and electrical devices, TVs, cable systems, VCRs, stereos, computers, VHF intermod, mobiles and more..... **ARR 261 \$20**

Ham Radio Made Easy

Practical advice you can use right away. Gets you on the air quickly and painlessly whether you're into repeaters, packet or anything else **ARR 182 \$15.95**



FCC Rule Book

Complete guide to all FCC regulations pertaining to amateur radio..... **ARR 161 \$12**





Hints and Kinks 15th Edition

Want to improve your station's performance or solve a problem? This is the book!..... ARR 187 \$12

QRP Power

Learn about low power transverter design, transceivers, transmitters & more ARR 256 \$12

Log Book

This universal log suits all amateur radio operations, DXing contests, rag-chewing, 8 1/2 x 11" ARR 201 \$5

Minilog Log Book

For portable/mobile operation, 6 1/2 x 4" ARR 205 \$4

Grid Locator Atlas

A must have for all contesters ARR 180 \$5

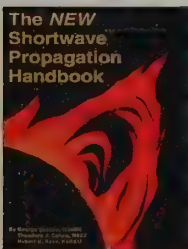


2001 Radio Amateur Callbook CD

Access callsigns, names and addresses of more than 1.5 million listings worldwide covering more than 250 countries, islands and dependencies.

FEATURES

- Amateur radio prefix maps
- QSL manager listings
- Print program with multiple entries to customize a mailing label or logging format
- Windows or DOS platform for US and International data retrieval
- Windows driven by mouse; DOS via menu
- Data display by callsign, last name, city, license class issue and expiration date
- Morse code sound output to PC speaker
- Search: U.S. data by callsign, last name, county, city and zip; International data by callsign
- Search clubs, military and silent keys
- US data includes time zones, latitude/longitude and area codes RAC 087603 \$49.95

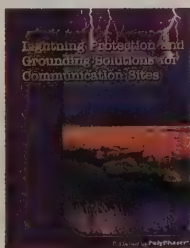


The New Shortwave Propagation Handbook

A "must read" for amateurs, shortwave listeners or any radio communicators who need to make the most productive use of radio spectrum, regardless of sunspot cycle...CQX SHORTWAVE \$19.99

Lightning Protection and Ground Solutions for Communication Sites

Written in a non-technical manner so anyone can understand and install appropriate protection/ground systems to guard their communications equipment against adverse pulses..... PLY GLEP \$20

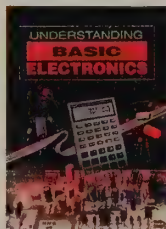


Pocket REF

Chapters on air and gas, carpentry, chemistry, computers, electricity, math, hardware, plumbing, steel and materials surveying, welding, general information and more. 100's of tables and charts, 1000's of conversions. Everything you need to know! SEQ POCKETREF \$9.99

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8 chapters on how to get on the air and enjoy ham radio using low profile tactics to circumvent CCN&Rs and other restrictive ordinances. Interference solutions, mobile operation, antenna systems and components ARR 310 \$14.95

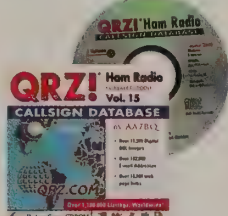


Understanding Basic Electronics

For beginners and those who want to brush up on electronic principles. Clear, simple explanations and loaded with illustrations ARR 328 \$20

Buckmaster HamCall CD-ROM for IBM PC Compatibles

Updated Frequently! Search over 1.5 million listings by name, address, city, state/province, zip, county, country and license class. Also displays license issue date, expiration, previous call and class, area code, e-mail address, URL, county, time zone, lat/longitude, grid square, beam heading and distance. Other features: DOS, Windows 3.1, 95 and 98 compatible • Extensive international listings • Label printing routine • Over 4,000 photos and QSL cards • Interfaces with most logging programs • Calculates beam heading BUC HAMCALL \$50.99



Walnutcreek QRZ! Ham Radio CD • v 15

Brings over 1,170,000 callsigns from stations around the world to your fingertips (60,000 from Russia and other CIS countries). Includes the latest FCC listings. • Over 182,000 e-mail addresses • Hundreds of radio and scanner modification files • Morse code training software • On-line FCC exam training software • Computer radio control programs • Over 11,300 digital QSL images • Supported by most logging and contest programs • Compatible with Windows 3.11/95/98/NT/2000, MS-DOS, OS2, Linux, and most UNIX WAL HAMQRZ \$29.99

CQ Getting Started in Ham Radio

A fast-paced video intro to the fascinating world of ham radio. CQ's experts show how to select equipment, which bands to use, how to use repeater stations for improved VHF coverage, the importance of grounding and the basics of soldering. Get the most out of your station, whether it's home-based, mobile or handheld..... CQX HAMVIDEO \$19.99

STUDY GUIDES

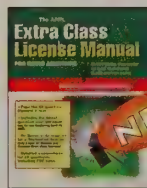


General Class License Manual

All study material needed for the test ARR 169 \$15

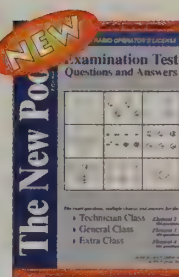
Extra Class License Manual

Complete source for test material ARR 155 \$19



The New Pools!

The exact questions, multiple choices and answers for the Elements 2-4 of amateur radio. The perfect way for an amateur to test their knowledge before taking the written exam .. W5Y QP3 \$9.99



The Gordon West book series include test questions, answers, charts, diagrams and explanations of correct answers.

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W5Y GWTM \$11.99

General Class

W5Y GWGM \$12.99

Extra Class

W5Y GWEM \$14.99

Technician Amateur Radio Licensing Seminar Video

Become a licensed ham operator without Morse Code. Easy-to-follow training course teaches what you need to know to get your Technician ticket. 88 min .. W5Y NCVP \$29.99



W5YI Amateur Radio License Computer-aided Instruction Software

Learn at your IBM/compatible PC! Nine 3 1/2" and 5 1/4" disks cover all written and Morse code exams — Novice through Extra. Review all 2,000 questions, take sample exams, learn Morse code, build telegraphy speed and more! Free Bonus — Complete Part 97 FCC Rule Book.

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Tech and General..... W5Y TPG \$49.99

General Class Upgrade W5Y GUS \$34.99

Theory Tapes by Gordon West, WB6NOA

Tech. Written Theory, 4 tapes.. W5Y GWT4 \$19.99

Gen. Written Theory, 4 tapes.. W5Y GWG4 \$19.99

Extra Written Theory, 4 tapes.. W5Y GWE4 \$19.99

Morse Code Test Preparation

Six code tapes, 0-7wpm W5Y GW05 \$29.99

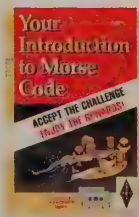


Ameco's complete Morse Code Instructor for IBM PC/XT/AT or compatible

Menu-driven, over 18 options, on-line "help" screens. Generates random charac., numbers, punctuation and QSO's. Similar to FCC/VEC exams. Ideal for beginners..... AME 107-PC-2 \$29.95

Your Introduction to Morse Code

This cassette tape series from ARRL will teach you to copy Morse code in order to pass the General class license. Set includes plain-language practice text & practice Morse code exams using the format of a typical amateur contact ARR 195 \$12



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Complete text and illustrations for all articles in QST, QEX and NCJ for a full year. CD-ROM includes:

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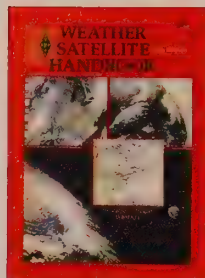
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Back issues of QST available in full years on CD-ROM. Every page is stored as a black-and-white image that can be read or printed. Easy to use software allows you to:

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Types of satellites currently in orbit and how they operate • How to buy or build weather satellite receivers and antennas • How to build an interface to view images received from satellites or shortwave WEFAX on a PC **ARR 342 \$20**

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A beginners guide to satellite operating, tracking and antennas. Detailed appendices and glossary **ARR 264 \$22**



Satellite Anthology 5th edition

A compilation of QST articles dealing with satellites like Amsat-Oscars 10 and 13, Russian RS series and Microsats **ARR 277 \$15**

Getting Started in Amateur Satellites

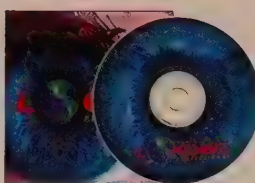
Learn how veteran operators set up satellite stations. Find out how to locate and track ham satellites with ease. Watch as operators access current satellites and contact far ranging stations around the world. This video is filled with easy to understand advice that can't be found anywhere else **CQX HAMSATVIDEO \$19.99**



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If it Orbits the Globe Logsat Can Track it! Track hundreds of satellites in dozens of windows. **Features:**

KANSAS CITY TRACKER support • Complete multi-tasking • Unlimited number of satellite windows can be opened at the same time • Voice alarms when satellite window becomes visible • 5 map projections, high or low resolution for 486DX2 and Pentium PC's or slower 386's • 3D antenna radiation diagrams can be displayed • On-line help • Includes The Satellite Encyclopedia. **Minimum Requirements:** Windows® 3.1/95/NT compatible • Mouse or compatible pointing device • Standard keyboard • 286 processor • 4MB RAM • 15MB hard disk space. **Optional:** PC compatible sound card with speakers • 486 with 32MB RAM • Kansas City Tracker rotor interface **LOG LOGSATPRO \$69.99**



Pocket PC REF

Hard to find information on IBM PC's - ASCII codes, numeric prefixes, video standards, decimal/hex conversions, printer codes, error codes, I/O pinouts, memory & address maps, modem commands and switch settings, scan codes, floppy drive types, CPU types, DOS history **SEQ POCKETPCREF \$14.99**



Practical Packet Radio

Everything you need to know including setting up a station, getting on DX packet cluster, & others **ARR 253 \$15.95**

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Help de-mystify the exciting, but sometimes confusing, world of packet radio. Learn how to get started using your computer on the radio. Included are step-by-step instructions on making packet contacts and using packet bulletin boards, networks and satellites **CQX PACKETVIDEO \$19.99**

MapSource CD

Provides owners of compatible Garmin GPS units with maps needed to get where they are going. Using a computer and MapSource software, enjoy high-speed transfer of maps from CD to GPS. For GPS-III Plus, e-Map Deluxe & NavTalk **GAR 010-10215-00 \$99.99**



MapSource Metroguide

Contains detailed US map with business and residential streets and address lookup capability once downloaded to a compatible Garmin GPS unit. Shows highways, local roads, interstates and exit services for all 50 states.

Displays points of interest and emergency services. Also includes marine navids and inland cartography. Designed for the Garmin Street Pilot and eMap Deluxe **GAR 010-10215-03 \$149.99**

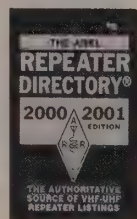


TOPO USA™

From the maker of Street Atlas USA - now hikers, bikers and outdoor enthusiasts can pre-view topographic terrain in all 50 states and plan the perfect outdoor adventure. Profile hikes and backroad trips for elevation, distance and degree of difficulty using the cross-sectional view. Select 3-D or 2-D views. Create on-road and off-road routes. Print detailed color topographic maps. Works with the DeLorme GPS Receiver, 3Com®, Palm Computing® and popular Windows® CE handheld computers **DEL TOPOUSA \$99.99**

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More than 20,000 listings for voice and digital repeaters and propagation beacons located in North, Central and South America. Lists more than 500 beacons from 14 to 24 GHz, band plans, tone chart, committees, clubs and more! **ARR 271 \$8**



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Practical, easy-to-understand information on every aspect of DXing. Learn about equipment, antennas, propagation and pile-ups **ARR 146 \$8**

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Repeater maps for all 50 states, Canadian provinces, Mexico, Central America and the Caribbean. **ARR 225 Closeout \$12**



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 Top DXers share their experience with equipment, antennas, operating skills and QSLing. You'll see hams work rare DX around the world. This valuable information gives you the competitive edge needed to master DXing **CQX DXINGVIDEO \$19.99**

2000/01 TravelPlus for Repeaters™
 Locate repeaters along any route and access data in ways never dreamed of. Quickly find info as needed to pre-program a rig or take along a list of repeaters for the full trip. Find repeaters within a specified range on selected bands. Change ranges along routes and specify locale • Print maps/lists based on route • Customize info • Locate open repeaters and those w/autopatch • Use a GPS rx and laptop with TravelPlus to locate repeaters near current location or to return home • Save route and repeater list files for a reference or for linking routes • Export lists for use with compatible software **ARR 322 \$39.95**



Monitor America
 A complete listing of public safety and business radio communications of almost every community in the nation. Includes maps, tone codes and repeater input/output frequencies. Listings of AM and FM radio stations with frequencies and formats. Race car teams, sections of Disney and other places **\$29.99**



CQ Getting Started in Contesting
 Whether a newcomer or experienced veteran, this video is for you! Get advice and tips from some successful competitors: Ken Wolff, K1EA; Dick Newell, AK1A; and CQ's own, John Dorr, K1AR. Explanations of jargon, tips for beginners, how to compete from a small station, operating secrets from "pros" and live QSOs..... **CQX CONTESTVIDEO \$19.99**

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 Six meters and up for the non-technical ham. Covers all types of VHF propagation and long range DXing, repeaters, moon-bounce, amateur satellite communications, techniques, coaxial transmission lines, VHF antennas, interference types & filters **RAC 087050 \$13.95**



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 An ideal introduction to VHF. See demonstrations of the latest radios. Also, learn about repeater usage as well as the more exotic VHF operating modes. Whether interested in packet, satellite or simply using your local repeater.. **CQX VHFVIDEO \$19.99**

Celestron Sky Map
 Big, durable, 11 1/2" x 13 3/4", spiralbound, book. Contains a basic star map and glow-in-the-dark star finder, seasonal star charts and the constellations and characteristics of stars **CEL 93722 \$19.99**



Planisphere and Planet Finder
 Spin disk until time of night lines up with the time of month. Place planets using guide on the back. Facing south, hold guide overhead with "south" at the bottom of the chart. The star and planet positions will match **CEL 93720-40 \$9.99**



Geochron World Watch
 "Real time" displayed for locations you select throughout the world. Illuminates areas currently experiencing daylight (sunrise and set). International Daylight Savings Time adjusts. Options to change colors and features **GEO WORLDWATCH \$49.99**



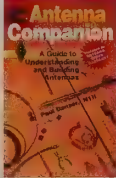
ANTENNAS
The Amateur Radio Vertical Antenna Handbook
 A vertical antenna may be just the thing for your area's conditions. Covering all aspects of vertical theory and design, this belongs on a serious amateur's shelf **CQX VERTICALBOOK \$9.99**




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 This book covers all aspects of design, theory and construction. With software for design, propagation forecasting and much more..... **ARR 126 \$30**



Your Ham Antenna Companion
 A guide to understanding and building antennas. Includes glossary of terms **ARR 357 Closeout \$10**



Interference Handbook
 How to locate and cure every aspect of radio frequency interference including TV, stereo, radio and phone **RAC 087093 \$13.95**



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 Lots of inexpensive, practical projects that work. Great guide for construction of loop, yagi & vertical ... **CQX W6SAIHFANT \$19.99**



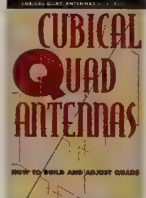
Antenna Compendium 4, 5 or 6 with software
 Baluns, HF beams, yagis and quads are just some of the subjects covered. Articles on antennas, transmission lines and propagation. Projects to build. Includes IBM software for plotting antenna model data files **ARR 138/ARR 139/ARR 137 ea. \$20**



Simple, Low Cost Wire Antennas
 This book shows you how to build an efficient antenna at a minimum cost ... **RAC 087077 \$13.95**



All About Cubical Quad Antennas
 The story of the cubical quad, characteristics, how they work, construction, tuning, adjustment and more.... **RAC 087034 \$13.95**



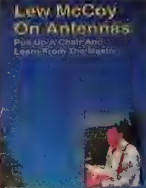
All About Vertical Antennas
 This book is the product of over 60 years of experimenting with antenna designs. Formulas, charts, graphs, etc.. **RAC 087107 \$13.95**



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 Use the Smith Chart to develop even the most complex matching network to maximize antenna effectiveness by minimizing feedline loss. **ARR 140 \$20**



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 Pull up a chair and learn from the master! Loaded with antenna projects for Tech thru Extra class. **CQX LEWMCCOY \$15.99**



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 Wire antennas range from simple to complex. Find one to deliver the performance you want. Dipoles, broadband and multi-band dipoles, loops, collinears, rhombics, wire beams, vertically polarized and receive antennas are all featured in here. There's even a chapter on tree-mounted antennas ... **ARR 344 \$14**



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 Enjoy even MORE wire antennas! Filled with innovative designs from the pages of QST and other ARRL publications **ARR 208 \$14**

105C 24 Hour Quartz

Wall Clock

Black, 10" diameter face, sweep second hand. Uses one "AA" battery .. **\$19.99**



Small 24-hour Clocks: A Dual Clock with separate UTC and local time display modules, and a Single Clock with 24 hour time only. Heavy brushed aluminum frame, 5/8" high LCD numerals, sloped face. Flashing seconds colon, battery included.

107B (left) Single, 2 1/4" w x 1" h x 2" d..... **\$9.99**

108B (right) Dual, 4 1/4" w x 1" h x 2" d..... **\$19.99**



112B DX'ers World Map

Clock Shows time at any QTH throughout the world on an attractive LCD world map. Also shows day, month, date and year. Choose 12 or 24 hour. Daylight saving time feature. Grey, cool bile backlight for night viewing 4.25" w x 3.3" h x 2.25" d.....

\$24.99

114B Giant LED

24/12 hour clock

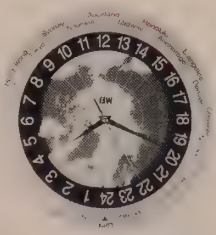
Has four HUGE 2.3" high digits. The 12 or 24-hour display format is visible 50 ft. away or more! Operates on 110VAC and has battery back-up feature. 6 1/2" x 13" w x 1" d..... **Closeout \$59.99**



115 WORLD Map 24

hour Quartz Wall Clock

Set it to GMT and you'll know what time it is in designated areas of the world any time of day. Premier cities outline the trim of the 12" diameter. Operates on "AA" battery (not included) ... **\$24.99**



116DC 12 VDC, 12 Hour LCD Travel Alarm Clock

Great for motor homes and trucks! Green 5/8" LED digits show 12 hour

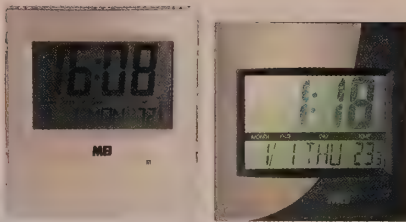
time format. Ten minute ID buzz, two-level alarm (100dB - high) low/high @ 110dB) 9V back-up battery. Power cord with cigarette lighter adapter attached. Compact, 4.5" w x 2" h x 4" d, 17 oz. **Closeout \$14.99**



118 Jumbo LCD™

24/12-hour clock

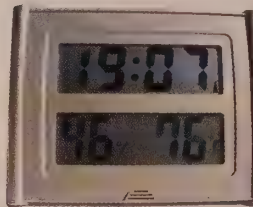
1.25" high with high contrast LCD numerals. Shows year, month, date and day in four different languages. Includes 100 year calender and flip stand. Uses one "AAA" batt. (not incl.). 5 3/4" h x 3 3/4" w x 1 1/2" d.. **\$24.99**



GIANT Display™ 12/24 Hour Calendar/Clocks Easily visible from 15-20 ft. away. Shows 12 or 24 hour time, digital calendar (year, month, date, day), and Celsius or Fahrenheit temperature. Looks good in the hamshack and all other environments.

119 (left) Silver/white, 8.5" w x 9" h x 1.2" d, operates on (2) "AAA" batteries (supplied) .. **Closeout \$34.99**

119B (right) Silver/green, 8.25" w x 8.25" h x 1" d, operates on (2) "AA" batteries (not supplied) .. **\$49.99**



120 US Atomic

Clock with

Monster LCD

Automatically synchronizes to the exact time signals WWVB. Two large (6" w x 2" h) LCD displays; top shows 24

or 12 hour time, bottom shows Relative Humidity and Inside Temperature. Desk or wall mount. Uses (2) "AAA" batteries (not included). Metallic tan, 8" h x 10.5" w x 0.75" d..... **\$69.99**

123 Eternity

Atomic Clock™

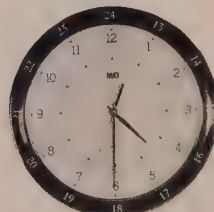
Solar powered and automatic time set by radio signals received from WWVB. Large (6 1/2" w x 2" h) LCD display, selectable 12/24 hour time format, digital calendar. Ordinary room light powers the solar cells and also replenishes a built-in rechargeable battery; also uses (2) "AAA" batteries (not included) for back-up power. Metallic tan, 9" w x 3.5" h..... **\$79.99**



125 DXer's Dream 24-

hour Quartz Wall Clock

12" diameter face shows 24 hour format with smaller day, date and 12 hour indicators. All dials set independently as desired. Uses a single "AA" battery (not included)..... **\$29.99**



126 12 Hour Quartz Wall Clock

A beautiful Quartz accurate wall clock with a clear, clean and highly visible 12 inch diameter face that's easily seen from 15-20 feet away. Features 12 hour digits on a clean,

white face, with a 24 hour trimline reversed in a handsome green and including red stop points and seconds digits. Operates for long periods on a single "AA" battery (not included)..... **\$24.99**

128 US Atomic Wall

Clock Huge, 14 inch

diameter with 12/24 hour and seconds dials on a white face. Automatically synchronizes to time signals from WWVB. Uses (2) "AA" batteries (not included)..... **\$59.99**



134AT (24-hour), **132AT** (12-hour) **See Thru™ LCD Clock** Transparent display makes the high-contrast, 1-3/4 inch digits appear to float in the air. Very loud alarm with snooze function. Silver-tone, 9" w x 3.5" h. Uses two "AA" batt. (not incl.)..... ea. **\$34.99**



152B ThermometerClock™ Shows

outdoor/indoor temperature & time. Huge LCD multiple display shows 12/24 hour time and Celsius/Fahrenheit. Auto daily update of min/max temp. readings and memory function that recalls readings during a selectable period. Wall mount or desktop display. Includes outdoor sensor and 10' wire. Requires "AA" batt. 5" h x 2 3/4" w x 3/4" d..... **\$24.99**



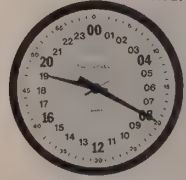
181 DXers Watch Check 12/24 hour

time around the world. By noting day and night around a rotatable bezel, estimate which bands are open to different parts of the world - even estimate best times of gray line propagation. It features a highly accurate Japanese quartz movement and NiteGlo™ hands. World cities encircle world map face to indicate zones. Adjusts to fit.... **Closeout \$19.99**

Benjamin Michael Industries INC.

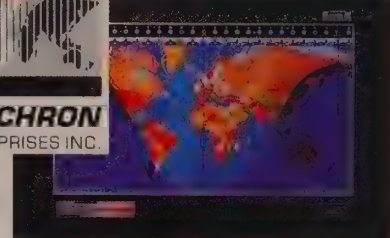


972A (left) Battery operated 12-hour time quartz controlled clock with sweep-second hand. Huge 12" dial allows excellent visibility in large rooms. Black textured case and clear glass crystal. Uses one "AA" battery. 14" diameter x 1 1/4" deep **\$28.99**



973A (right) 24-hour version of 972A **\$49.99**

972AD 14" dia., 12 and 24 hour format wall clock, sweep-second hand. Uses "AA" battery **\$32.99**



STDBLK/GOLD or STDOAK/GOLD A framed,

lighted world map which is a continuous belt of mylar film in constant motion synchronized with Earth's orbit. Displays current time world-wide, sunrise/set, and current season everywhere via an illuminated pattern • Allows for calculation of time in non-standard zones • Shortwave radio prefixes • Standard model in black or oak with gold trim • 3' x 2', wall mounting..... **Drop Shipped \$999.99**

Available by Special Order in numerous trims/finishes, and in 3 other models (with analog 0-60 min. scale).

TELESCOPES

Professional Series of astronomical telescopes are engineered with unparalleled structural and optical quality. These top-of-the-line models will give many long years of reliable, dependable use and a lifetime of journeys to the stars. This series is highlighted by a professional quality format: Professional format 1.25" Kellner eyepieces • Aluminum optical tube assembly • High quality glass optic objectives • Full-length, heavy-duty, variable-height aluminum tripods • Clock drive ready deluxe metal equatorial mounting • Pro format 6x30 finderscopes • 6-point finderscope adjustments • Metal access. trays • Pro counterweight system • Fine-adjustment controls.

78-0040 90 refractor • Focal length: 1,000 • 25mm eyepiece • Magni.: 40 • Multi-coated objective lens • Flexible fine tracking cables.... **\$439.99**

78-0200 (right) 4.5" reflector • Focal length: 900 • 9mm and 25mm eyepieces • Magnifications: 36, 72, 100, 200 • 2x Barlow lens **\$349.99**



Voyager® Series Engineered to exacting standards with exclusive features: the first astronomical zoom telescope • Penta mirror technology that yields right to left correct views of the night sky • High quality metal easy-track and metal equatorial mounts • Innovative adjustable aluminum tripods • Exclusive Rotary Power turret eyepieces.

78-9440 (top) 60mm refractor • Focal length: 700 • 8, 12.5mm eyepieces • Magni.: 56, 88, 168, 263, 280, 440 • Penta mirror, Easy Track® mount • Adjustable hardwood tripod • Erecting lens **\$89.99**

78-9470 (bottom) 60mm refractor • Focal length: 750 • Zoom, 8, 15mm eyepieces • Magnifications: 50, 94, 50-150, 250, 470 • Penta mirror • Easy Track® mount • Adjust. tripod **\$129.99**

78-9675 (middle) 4.5" reflector • Focal length: 900 • 4, 12, 20mm eyepieces • Magnifications: 45, 75, 135, 225, 675 • Clock drive equatorial mount • Adjustable aluminum tripod • 6-point finderscope mount • Fine tracking **\$229.99**

New Voyager® Quality Dobsonian telescopes with all metal tube assemblies and innovative mounts will satisfy anyone just getting started to the advanced amateur astronomer. The new additions include a precision rack and pinion focuser and are engineered with a 1.25" format.

78-6000 6" reflector • Focal length: 1,200mm • 25mm eyepiece • Magnification: 48 • Dobsonian mount • 6 x 30 Finderscope • 6-point finderscope mount..... **\$299.99**

78-8000 Looks the same as 78-6000 • 8" reflector • Focal length: 1,200mm • 25mm eyepiece • Magni.: 48 • Dobsonian mount • 6 x 30 Finderscope • 6-point finderscope mount..... **\$399.99**

TELESCOPE ACCESSORIES

(See Price Guide to match access. to correct telescope model)

78-0101 1 1/4", 9mm Kellner eyepiece..... **\$29.99**

78-0102 1 1/4", 25mm Kellner eyepiece..... **\$29.99**

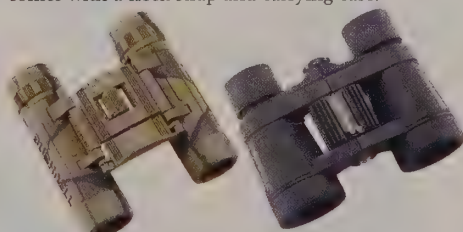
78-0103 1 1/4" format erecting prism..... **\$69.99**

78-0105 1 1/4" format 2x Barlow lens **\$39.99**

78-0106 Clock drive (DC/battery power) . **\$89.99**

BINOCULARS

Powerview® Truly the "best of both worlds." Contemporary styling and design combined with legendary Bushnell quality and durability. The easy-to-hold and easy-to-use aspect of these binoculars also converge to make Bushnell Powerview binoculars an excellent value for the general and outdoor user. Powerview comes with soft rubber covering and the patented "Insta-Focus®" system. Each binocular comes with a neck strap and carrying case.



13-1226 (left) Compact binocular with folding roof prism. Designed in camo. Features include: 12x25 magnification • 240 ft. field of view at 1000 yds. • 2.1mm exit pupil • 9.7oz **\$29.99**

13-0430 (right) LiteVision™ • 4x30 magnification • 650 ft. field of view at 1000 yds. • 7.5mm exit pupil • 7.5oz..... **\$18.99**



13-1250 (right) InstaFocus® • 12x50 magnification • Porro prism • 265' field of view (1000 yds.) • 4.2 mm exit pupil • Adapts to tripod • 27oz ... **\$59.99**

13-2514 (left) Compact, folding binocular • 8x21 magnification • Roof prism • 375 ft. field of view at 1000 yds. • 2.6mm exit pupil • 7oz **\$24.99**

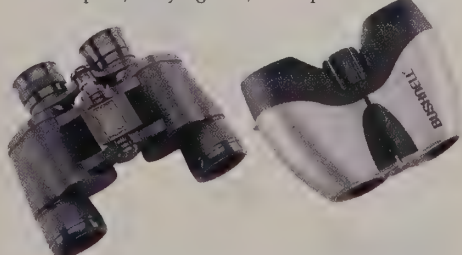
Legacy® binoculars feature old world craftsmanship with new world styling. Designed for those who appreciate modern styling, but still want the unsurpassed performance of traditional optics. Legacy includes multi-coated optics, BAK-4 prisms, soft durable rubber armoring and gold trim. Designed with outdoor enthusiasts' needs in mind, the 8x24 and 10x24 compacts are O-Ring sealed and nitrogen purged for water/fogproof protection. This line offers standard, zoom, high power, extra wide angle, and compact configurations along with sleek ergonomic styling, case, and neck strap.

12-1025 Compact, rubber-armored binocular • 10 x 25 magnification • Porro prism • 262' field of view (1000 yds.) • 2.5mm exit pupil • 8.3oz ... **\$119.99**

InstaVision® This line features convenient focus free operation, amber-coated optics, & rubber armoring for durability. The InstaVision action package comes complete with a binocular belt pack case for convenient around-the-waist carrying. They also come equipped with Bushnell's exclusive Sportview® handstrap.

17-7351 Wide angle, focus-free binocular • 7x35 magnification • Porro prism • 490 ft. field of view at 1000 yds. • 5mm exit pupil • Handstrap and belt pack included • Adapts to tripod • 21oz.... **\$49.99**

Falcon is feature packed and value priced. Perfect for sporting events, sightseeing, nature study, backpacking, concerts and theater. The line includes the Bushnell patented InstaFocus® focusing system, coated optics, carrying case, & strap.



13-0721 (right) Compact binocular featuring 7x21 magnification • Porro prism • 340 ft. field of view • 3mm exit pupil • 4.7oz **\$39.99**

13-3410 (left) InstaFocus® • 7x35 magnification • Porro prism • 420' field of view (1000 yds.) • 5mm exit pupil • Adapts to tripod • 21oz **\$29.99**

NIGHT VISION

26-3652 Night Vision Scope Collects & amplifies existing light, allowing you to see in low-light conditions too dark for the naked eye. Included Infrared Illuminator allows operating even in complete darkness. • 3.6x image magnification • Brightness control • 52mm objective for enhanced brightness • Includes comfortable adjustable hand strap and carrying bag • Rugged construction for travel and outdoor • Requires 2 "AA" batteries (not included) • 3 lbs. **\$199.99**





TELESCOPES

31052 Firstscope 114 Premium A high quality, economical telescope w/superb optical system housed in a glossy black metal tube. The equatorial mount is quite stable, w/setting circles and slow motion controls on both axes for easy, smooth tracking. Features include • 114mm (4.5") aperture • 900mm focal length • f/8 focal ratio • 6x30 Finderscope • 1 1/4" Focuser with 0.96" adapter • 20mm Plossl and 10mm SMA eyepieces • Sturdy, adjust. wood tripod with accessory tray • 19 lbs. **\$349.99**

11051 G-5 An ultraportable telescope with optics made in the U.S.A. Serious performance, razor sharp images. Single axis motor drive operates on four D-cells and allows automatic tracking of celestial objects. Features: 5" (127mm) aperture • Focal length of 1250mm • Focal ratio of f/10 • 6x30 Finderscope • 25mm (50x) SMA 1 1/4" eyepiece • 1 1/4" eyepiece • 1 1/4" 90° diagonal • Multi-coated Schmidt-Cassegrain optics (U.S.A. made) • Battery operated motor drive • German EQ mount with adjustable height • 24 lbs **\$749.99**

31034 Tabletop 76 Small, but powerful, this ultra portable telescope is ideal for traveling and quick set-up. The handy but sturdy table top mount provides steady viewing. Features include: 76mm (3") aperture • 600mm focal length • f/8 focal ratio • Standard 0.96" accessories include: 4mm SR (150x), 20mm H (30x) and 2x Barlow eyepieces • 5x24 right-angle Finderscope • 15 lbs **\$99.99**



MONOCULARS & BINOCULARS

Zeiss Binoculars - World renowned and with a reputation for excellence. Synonymous with lasting quality and have characteristics which should not be taken for granted: carefully selected materials, outstanding optics, precision engineering and life long reliability.

Designed with the most modern techniques, their precisely computed prisms and lenses, minutely adjusted optical elements and the famous anti-reflection coating give outstanding high contrast image quality over the entire field of view.

As for durability, the optical components are fitted so as to be fully impact-resistant and are sealed against dust and humidity. The Zeiss multi-layer "T" coating gives impressive brilliance with superb light transmission, high contrast images & excellent low light performance.

All come with straps, case or soft leather pouch and lifetime transferable warranty.



31056 C150-HD (left) Mounted on a rigid CG-4 equatorial mount. Counterweight, latitude scale, setting circles and slow motion controls on axes are standard. Features include: 150mm (6.0") aperture • Focal length of 1000mm • Focal ratio of f/7 • Standard 1 1/4" accessories include: 20mm Plossl eyepiece (50x) and Focuser • 6x30 Finderscope • CG-4 EQ mount • Sturdy, adjustable metal tripod with accessory tray • 41 lbs **\$499.99**

11015 Celestar 8 (right) Engineered for optical performance in an affordable, full-featured Schmidt-Cassegrain scope of large enough aperture to do serious deep-sky observing. Features: 8" (203mm) aperture • 2032mm focal length • f/10 focal ratio • 6x30 finderscope • Standard 1 1/4" accessories include: 25mm SMA eyepiece (81x), Star diagonal and visual back • Fork mount & wedgopod • 41 lbs **\$1099.99**

11031 NexStar 5 Easy to set-up - no need to polar align, just set it on a table top. Using the hand control you can select a catalog, change the slew (motion) rate, get information on an object, or simply tell if an object is visible. The NexStar's database contains over 18,000 objects including all of the popular catalogs. Features include: 5" (127 mm) aperture • Focal length of 50" (1250mm) • Focal ratio of f/10 • 6x30 Finderscope • 25mm Plossl eyepiece • Camera: 25x • Schmidt-Cassegrain optics • Battery operated motor drive • 11" optical tube length • 17.6 lbs **\$1199.99**

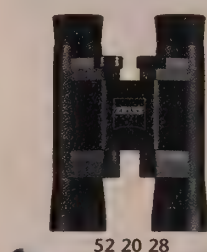


21072 Firstscope 80 EQ WA (left) A wide angle, rich field telescope with a short tube that easily captures breathtaking, wide views of large deep-sky objects. Sturdy German equatorial mount and tripod. The weight (13 lbs.) and short tube make this a super portable instrument for easy traveling. Features include • 80mm (3.1") aperture • Focal length of 400mm • Focal ratio of f/5 • Fully multi-coated optics • High quality 6x30 Finderscope • Standard 1 1/4" accessories include: 25mm SMA eyepiece (16x), Focuser & 90° diagonal • Sturdy, adjustable wood tripod with accessory tray..... **\$299.99**

31031 Firstscope 76 EQ (right) A fine instrument for the beginning observer. It offers many of the advantages of the Newtonian design at 3" aperture. This model uses the German equatorial mount with setting circles and slow motion controls on both the right ascension (R.A.) and declination (DEC.) axes, making it easier to locate and track objects. Features include • 76mm (3") aperture • Focal length of 700mm • Focal ratio of f/9 • Standard 1 1/4" accessories include: 12.5mm H eyepiece (56x), 8mm H eyepiece (88x), 2x Barlow lens and Focuser eyepiece (16x), Focuser and 90° diagonal • 5x24 Finderscope • Sturdy, adjustable wood tripod with accessory tray • 15 lbs **\$159.99**

TELESCOPE LENSES (not for 31034)

93213 1 1/4" 2x economy Barlow lens **\$19.99**
93507 1 1/4" 2x deluxe Barlow lens **\$59.99**
93340 1 1/4" 10mm ocular Plossl lens **\$59.99**
93342 1 1/4" 17mm ocular Plossl lens **\$49.99**
93344 1 1/4" 26mm ocular Plossl lens **\$49.99**



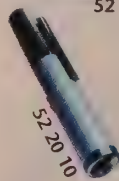
52 20 28



52 20 47



52 40 13



52 20 10



52 30 09



52 56 59/52 40 07



52 40 06

Model	Special Features	Magnification	Prism System	Field of View ft @ 1000yds	Wt. (oz)	Exit Pupil (mm)	Price
52 20 10	MiniQuick, Compact, T* Coated, Monocular	5x10	-	300	0.8	2.0	\$89.99
52 20 28	Pocket-sized, Low Weight for hikers, etc.	10x25	Roof	285	7.1	2.5	379.99
52 20 47	Pocket-sized, High Power, Center Focus, T* Coated	10x25	Roof	285	7.1	2.5	459.99
52 30 09	Center Focus, Multi-layer Coated, Rubber Armored	8x30	Roof	360	15.9	3.75	399.99
52 40 06	Center Focus, T* Coated, Rubber Armor, Wide-angle	7x42	Roof	450	28.2	6.0	949.99
52 40 07	High Twilight Performance, Wide angle Eyepieces	7x45	Roof	151/453	42.3	6.4	1199.99
52 40 13	Center Focus, T* Coated, Rubber Armor, Wide-angle	10x40	Roof	330	26.8	4.0	969.99
52 56 59	High daylight/twilight performance, Wide Angle	8x56	Roof	132/396	51.5	7.0	1399.99





ASTRONOMICAL TELESCOPES

ETX-60AT/0605-04-01

60mm Achromatic Refractor (pictured) Excellent portable for beginning astronomers. Observe all major planets, except Pluto, easily. Also great for birdwatchers or naturalists. • 2 eyepieces (MA 9mm/39x and MA25mm/14x) • Multi-layer coated, achromatic optical tube assembly (D=60mm, F=350 mm f/5.8) • Internal flip-mirror system for either straight or 90° observing • Fork mount with electric slow motion controls, setting circles and locks on both axes • Electronic control panel • 9-speed, dual-axis motor drive system with Autostar™ computer control • Sidereal-rate tracking • Requires 6 "AA" batteries • 6.7 lbs **\$299.99**

ETX-70AT/0705-04-01 70mm Achromatic Refractor Identical to ETX-60AT except for optical tube (D=70mm, F=350mm f/5) • 7 lbs..... **\$349.99**

ETX-90EC/3514-03-04 96mm Maksutov-Cassegrain The perfect ultraportable field telescope. • 8x21mm erect-image viewfinder • Series 4000 Super Plossl 26mm eyepiece (1.25") • Super multi-coated optical tube assembly (D=90mm, F=1250mm f/13.8) • Internal flip-mirror system for straight or 90° observing • Fork mount with electric slow-motion controls, setting circles and locks on both axes • Electronic control panel • 4-speed (8x, 32x sidereal, 0.75°/sec, 5°/sec), dual-axis motor drive system with electronic Autostar™ hand controller • 8 "AA" batteries required • 9.2 lbs **\$595.99**

ETX-125EC/0515-03-01 138mm Maksutov-Cassegrain Same as the ETX-90EC, but with larger optical assembly (D=127mm, F=1900mm f/15) and 8x25mm right-angle viewfinder. • 19 lbs.. **\$895.99**

DS-90EC/20091 90mm Altazimuth Refractor (left) The ultimate telescope for high-definition imaging of Moon, planets and terrestrial objects. Ideal for deep-space observations of galaxies and nebulae. • 6x30mm viewfinder • Two eyepieces (MA25mm, MH9mm) • Multi-coated, achromatic objective lens (D=90mm, F=1000mm f/11.1) • Rack-and-pinion focuser with sleeve lock with 1.25" and 2" eyepiece holders • Altazimuth mount with variable-tension locks on both axes • Cradle ring assembly • Dual-motor electronic control (EC) system • StarNavigator™ PC-compatible software (database of over 10,000 celestial objects) • Ten "AA" batteries required • 15 lbs **\$499.99**

DS-114EC/20114 114mm Newtonian Reflector (right) The 114mm aperture greatly enhances viewing structural detail in a galaxy's spiral arms, the filamentary dust lanes of a nebula or the resolution pinpoint stellar images within a globular star cluster. • 6x30mm viewfinder • Two 1.25" eyepieces (MA25mm, MH9mm) • Aluminized and multi-coated primary mirror and matching elliptical flat secondary mirror (D=114mm, F=910mm f/8) • Rack-and-pinion focuser with sleeve lock with 1.25" and 2" eyepiece holders • Altazimuth mount with variable-tension locks on both axes • Cradle ring assembly • Dual-motor electronic control (EC) system • StarNavigator™ PC-compatible software (database of over 10,000 celestial objects) • Ten "AA" batteries required • 18 lbs **\$399.99**

DIGITAL ELECTRONIC TELESCOPES

All models in this line come with a full length, aluminum, adjustable tripod with accessory shelf.

DS-60/20060 60mm Refractor Ideally suited to beginning astronomers or terrestrial observers • 5x24mm viewfinder • Multi-coated, achromatic objective lens (D=60mm, F=700mm f/11.7) • Two 1.25" eyepieces: MA25mm, MH9mm • Rack-and-pinion focuser with sleeve lock and eyepiece holder • Altazimuth mount with variable-tension locks on both axes • StarNavigator™ PC software (database of over 10,000 celestial objects) • 9 lbs **\$199.99**

DS-60EC/20061 60mm Altazimuth Refractor (left) Identical optically and mechanically to the DS-60 (above), but includes the dual-motor electronic control system (EC). This system comes with a control panel and 4-speed electronic controller. Runs on 10 "AA" batteries (not included) • 10 lbs. **\$269.99**

DS-70EC/20071 70mm Altazimuth Refractor (right) The multi-coated 70mm optics captures 136% more light than a 60mm. • 5x24mm viewfinder • 2 eyepieces (MA25mm, MH9mm) • Dual-motor electronic control system (EC) with 4-speed electronic controller • 2" rack-and-pinion focuser with sleeve lock • 1.25" and 2" eyepiece holders • Achromatic objective lens (D=70mm, F=700mm f/10) • Altazimuth mount with variable tension locks on both axes • StarNavigator™ PC-compatible software (database of over 10,000 celestial objects) • 10 "AA" batteries required • 11 lbs..... **\$299.99**

Maldol

A Tradition of Consistent Quality

HAND CRAFTED ANTENNAS

From Professional Engineers

MK-30H Motorized Mount

The ultimate in convenience.

12VDC Heavy Duty Motor with Remote Switch Attaches easily to trunk lids or the rear door of Vans/SUVs. 360° adjustable. Slip-clutch protects the motor gears from stripping. Max Antenna Height: 62 inches. Max Antenna Weight: 16oz. Accepts standard SO-239 cable assembly (FVS-50) for mounting PL-259 type antennas. (NMO antennas require SO-239 cable assembly and Comet AD-25M adapter)



PRM-T Heavy Duty Lip Mount

Attaches to a trunk or rear door of Vans/SUVs. Holds antennas up to 85 inches securely. Completely adjustable, rubber gasket protects vehicle paint.

FVS-50 Deluxe Coax Cable Assembly

Attach the FVS-50 to the PRM-T heavy duty adjustable mobile mount. 16 feet 9 inches total length with 18 inches of RG-188 type coax for easy entry into the vehicle without causing wind noise, water leaks or coax damage. PL-259 barrel is detachable for easy installation, weather cap included.

HT ANTENNAS

"Cat Whisker" whip is lightweight and very durable. Made from the same material as unbreakable eyeglass frames.

AS-30

2M/70cm HT "GAIN" Antenna
Gain: 0/2.15 Length: 15 inches
Conn: SMA

AS-20

2M/70cm HT Antenna
Length: 8.5 inches
Conn: SMA

MOBILE ANTENNAS



EX-104B/EX-104BNMO

2M/70cm Dualband Antenna
Gain: 0/2.15dBi Length: 15 inches
Max Power: 50W Conn: PL-259 or NMO

EX-107RB/EX-107RBNMO

2M/70cm Dualband Antenna
Gain: 2.6/4.9dBi Length: 29 inches
Max Power: 80W Conn: PL-259 or NMO
Ground Independent

SHG-140B/SHG-140BNMO

2M Mobile Antenna
Gain: 4.1dBi Center Loaded 5/8 wave
Length: 56 inches Max Power: 200W
Conn: PL-259 or NMO
Ground Independent

SHG-1500B/SHG-1500BNMO

2M/70cm Mobile Antenna
Gain: 4.5/7.5dBi Length: 59 inches
Max Power: 200W Conn: PL-259 or NMO
Ground Independent

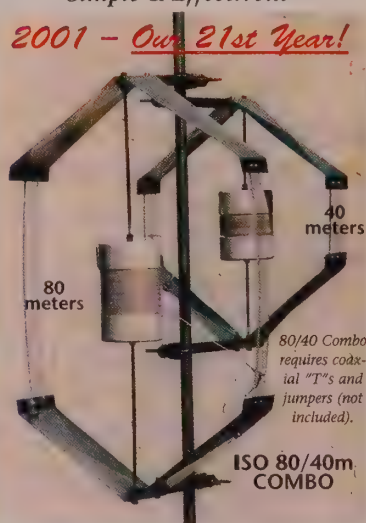


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ISOTRON BILAL COMPANY

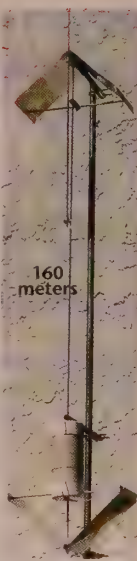
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Simple & Effective...

2001 - Our 21st Year!



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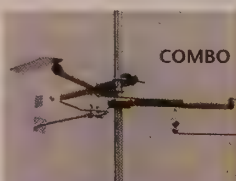
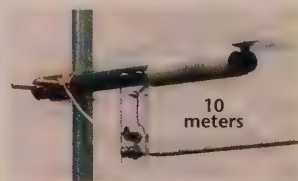
- Solve restricted space problems.
- Easy, quick, and simple installation.
- Handles up to 1,000 watts PEP.
- Excellent portable operation - emergencies, RV's, field day, motels, Maritime operation.
- Not dependent on a grounding system for performance.
- Unobtrusive appearance, making a very discreet looking installation.
- Very Stealth.
- Excellent Low Noise reception and transmitting quality performance is not compromised by its compact design.
- Tunes and performs without radials.
- Multi-band operation on one feedline with back to back mounting. Any other combination of three bands may be substituted on special order.
- Durable construction, can be used in extreme weather conditions, will not bend in high winds. No motors or mechanical tuning devices to fail.



Common Specifications: 1000W PEP power rating (300W, CW, AM, FM, RTTY) • 50-75Ω coax feed • Omni-directional radiation pattern • Bandwidth shown is within 2:1 SWR but may vary with environment • Stainless steel fasteners • Zinc plated u-bolts • Tempered aluminum components • Cast acrylic and PVC insulators • THHN #14 solid copper coils • 85 mph wind rating

Individual Specifications:

Model	ISO 160C	ISO 80	ISO 40	ISO 20	ISO 15	ISO 10	ISO 6
Band	160 meters	80 meters	40 meters	20 meters	15 meters	10 meters	6 meters
Freq.	1.8-2.0MHz	3.5-4.0MHz	7.0-7.3MHz	14-14.35MHz	21-21.450MHz	28-30MHz	50-54MHz
hxwx (in.)	114 x 16x15	32x16x15	22x16x15	21x8x4	21x1½x4	16x1½x4	16½x2x4
BW	100 KHz	110KHz	250KHz	350KHz	450KHz	1MHz	1.25MHz
Windload	1.697 sq. ft.	1.37 sq. ft.	1.0 sq. ft.	0.23 sq. ft.	0.23 sq. ft.	0.16 sq. ft.	0.13 sq. ft.
Weight	7 lbs.	6 lbs.	4 lbs	2 lbs	2.0 lbs	1.5 lbs	1.5 lbs.
PRICE	\$169.99	\$95.99	\$85.99	\$74.99	\$64.99	\$64.99	\$69.99



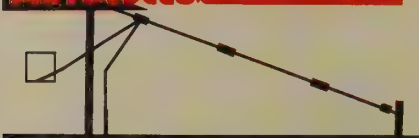
Multiband Models (top & right)

ISO 80/40 COMBO Same as individual model specifications above. Operate 80/40 meters with one feed line 32"x16"x30", 2.37 sq. ft. 10 lbs..... **\$168.99**

ISO 20/15/10 COMBO Covers same as individual model specifications above. Operates 20/15/10 meters with just one feed line line **\$187.99**

SPECIAL ORDER! - You can make up your own combination. Substitute 30m for 40m in the 80/40 Combo or 17m for 12m in the 20/15/10 Combo. MARS, CAP & Commercial models available.

ALPHA DELTA COMMUNICATIONS, INC. AA



SHORTWAVE ANTENNAS

DX-SWL Shortwave Sloper Antenna Covers 13, 16, 18, 19, 21, 25, 31, 41, 49, 60, 90 & 120 meter shortwave bands, plus the AM broadcast band. Sloper design provides outstanding reception of low-angle DX signals. Multi-band transmit capability with an antenna tuner, handles up to 2000 watts. Overall length is 60 ft., requires 50Ω coaxial cable **\$79.99**



DX-ULTRA Shortwave Dipole Covers AM broadcast through 30MHz. Efficient, low-noise, broadband performance for medium wave, tropical, international SW, military, government, embassy, maritime, aircraft, commercial and utility frequencies. Designed with inductors, parallel wire elements and center insulator with built-in static electricity protector. Length is 80 ft. - may be installed as a dipole, inverted-V, or full sloper. It can be used with an antenna tuner as a transmit antenna up to 2kW. Connector accepts coaxial cable or balanced line. Assembled..... **\$119.99**

Van Gorden Engineering



DIPOLE ANTENNAS

Complete with Hi-Q 1:1 balun, #14 stranded copper antenna wire, plastic insulators, and 100 ft. of nylon rope. Rated for full legal power. May be used in an inverted-V configuration.

D-80 80/75m, 130'	\$32.99
D-40 40m, 66'	\$29.99
D-20 20m, 33'	\$28.99
D-15 15m, 22'	\$27.99
D-10 10m, 16'	\$26.99

Shortened Dipoles Construction is the same, and includes traps as shown above.

SD-80 75/80m, 90'	\$36.99
SD-40 40m, 45'	\$34.99



ALL BANDER All Bander Dipole Covers 160 to 10M using an antenna tuner with balanced output. Full 135 ft. long (or less, as an inverted V or sloper). Trim to fit small lots. Assembled, with #14 gauge copper wire, center and end insulators and 100 ft. of 450Ω balanced line. 2KW PEP **\$29.99**

SHORTY All Bander As above, but with loading coils to shorten the length to 70 ft. overall **\$44.99**



MULTIBAND ANTENNAS

G5RV Covers 3.5 to 30MHz, +1.8MHz as a Marconi-type antenna with a tuner. Consists of a 102 ft. flat top with a 31 ft. long section of 300Ω KW twinlead, a transformer/coupler and 70 ft. of RG-8X coax and connector. 2KW PEP, assembled **\$50.99**

G5RV JR 7-30MHz, 52', 17 ft. twinlead. **\$24.99**

G5RV-E 3.5-30MHz, 102', 31 ft. twinlead **\$28.99**

G5RV-M 1.8-30MHz, 204', 65' twinlead ... **\$50.99**

Ventenna

Ventenna™ Get around those antenna restrictions and finicky neighbors. The Ventenna is virtually unnoticeable. It looks like part of a normal structure. To install, just slip over an existing 1"-2½" plumbing vent pipe, connect the coax - you're on the air. Ready to go! No tuning or measuring required. Single band models for 2m, 220MHz or 440MHz.

VT-14 2m, 3', 2.6dB gain.... **C/O \$39.99**

VT-22 220MHz, 25", 2.6dB. **C/O \$39.99**

VT-44 440MHz, 14", 2.6dB. **C/O \$39.99**

VT-15S 3' scanner, 2.6dB ... **C/O \$39.99**





Low Loss, Broadband, Coax Surge Protector

UL listed – provides greater protection for your ham gear from lightning and static charges much more effectively than the lower cost air-gap types.

The heart of this unit is the Arc-Plug™, which consists of two electrodes hermetically sealed in a gas filled ceramic cylinder. Acting like a voltage dependent switch, it can repeatedly carry large currents for brief periods of time. When an excessive voltage surge occurs on your feedline line, an arc forms between the electrodes conducting it harmlessly to ground, reducing feedline voltage to a safe value.

After repeated zaps (over a period of years) the Arc-Plug™ may need replacing. It's time when your receive is down or the feedline VSWR has increased.

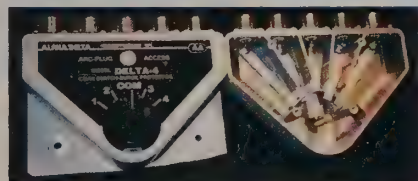
- **Frequency Range:** DC thru 3 GHz – better than narrow band DC blocked or stub designs. **Typical Insertion Loss:** 0.1dB @ 1 GHz; 0.2dB @ 2 GHz; and only 0.5dB @ 3GHz.
- The impedance compensated thru-line cavity design allows control voltages to pass thru the device, instead of the "wire around" requirement of DC blocked designs
- The "O" ring sealed knurled knob allows the Arc-Plug™ to be replaced without tools and without removing the protector from the circuit

ATT-3G50 N Females, 3.0GHz (200W) **\$59⁹⁹**

ATT-3G50U UHF Females, 500MHz (200W).. **\$49⁹⁹**

2KW versions of both models available at no extra cost; add HP suffix to the model number.

Lightning Surge Protected 2 & 4 Position Coax Switches



Alpha Delta Coaxial Antenna Switches are made only in the U.S.A. The extremely high quality custom design features a cast housing with a constant impedance micro-strip cavity for outstanding performance through UHF. No lossy wafer switches are used, and a solid positive detent roller bearing switch drive leaves no doubt as to which position is selected. The unused antenna circuits are automatically grounded to reduce antenna interaction, noise and the effects of lightning. For the antenna circuit that is in use, the famous replaceable Alpha Delta Arc-Plug™ cartridge provides continuous protection. Antenna switched in or out, you're well protected both ways! The Arc Plug is easily accessed through front panel so you may permanently mount the switch to any surface. Both the two and four position models handle full legal power.

DELTA-2 2-position coaxial switch with SO-239 connectors, rated for up to 500MHz..... **\$49⁹⁹**

DELTA-2/N 2-position coaxial switch with N-type connectors, rated for up to 1.3GHz..... **\$64⁹⁹**

DELTA-4 4-position coaxial switch with SO-239 connectors, rated for up to 500MHz..... **\$79⁹⁹**

DELTA-4/N 4-position coaxial switch with N-type connectors, rated for up to 1.3GHz..... **\$89⁹⁹**

New! CONSOLE DELTA 4 - see p.93

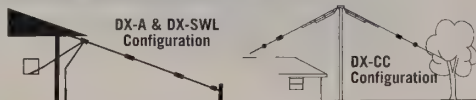
Limited Space High Performance Antennas

Unlike the usual trap antenna, ALPHA DELTA antennas have no capacitors to break down under high RF voltages, and the unique "ISO-RES" inductors and #12 insulated solid copper wire allow full-legal power operation. The direct 50Ω coaxial feed does not require a tuner when operated in the resonant bands, but is recommended for multi-band operation.

SLOPERS



- **NO-TRAP DESIGN**
- **STAINLESS STEEL HARDWARE**
- **ASSEMBLED**
- **SEVERE WEATHER RATED**



DX-A 160-80-40 Meter 1/4-wave Twin Sloper A top performing low frequency DX antenna. Combines the DX firepower of the 1/4-wave sloper with the wide bandwidth of the 1/2-wave dipole. One leg is 67 ft., the other is 55 ft. Installs like an Inverted-V with ground return accomplished thru tower or down-lead **\$59⁹⁹**

DX-B 1/4-wave DX sloper Single wire, high performance on 160, 80, 40 and 30M in limited space. Requires only 60 ft. overall to provide amazing DX performance at heights of only 35 ft., and with the low end at only 8 ft. above the ground. Stainless-steel hardware, #12 solid copper wire and efficient Alpha Delta "Iso-Res" RF choke coils. For broadbanded performance like the DX-A, the DX-B can be used with an antenna tuner. Direct 50Ω coaxial feed, rated for full legal power. Comes pre-assembled and pre-tuned. **\$69⁹⁹**

DX-SWL SWL Broadcast Sloper Covers the 13, 16, 19, 21, 25, 31, 41, 49, 60, 90, and 120M short-wave bands plus the AM broadcast band. Sloper design provides outstanding reception of low-angle DX signals. Multi-band 2KW transmit capability by using an appropriate antenna tuner. Overall length – 60 ft **\$79⁹⁹**

DIPOLAS



ALL ALPHA DELTA Dipoles use the DELTA-C Hardware Kit

Short Multi-band Dipoles

DX-CC "No-Trap" 80-40-20-15-10 meter dipole or inverted V. Overall length – 82 ft..... **\$119⁹⁹**

DX-DD "No-Trap" 80 and 40 meter dipole or inverted-V Overall length – 82 ft..... **\$89⁹⁹**

DX-EE "No-Trap" 40-20-15-10 meter dipole or inverted V Also covers 30, 17 and 12 meters using an antenna tuner. Overall length – 40 ft. **\$99⁹⁹**



DX-Series Full-Size Monoband Dipoles

These FULL SIZE dipoles utilize the Delta-C Center Insulator with built-in Arc-Plug® Surge Suppressor, described to the right. Comes fully assembled using #12 insulated high-strength solid copper wire, CIN end insulators and 50 ft. nylon of support rope. Useable with coaxial cable or open-line. Rated for legal power.

DX-80 For 3.5 MHz (75-80M) – 133 ft. long **\$49⁹⁹**

DX-40 For 7 MHz (40M), – 66 ft. long **\$39⁹⁹**

DX-20 For 14 MHz (20M) – 33ft. long **\$39⁹⁹**



DX-LB Low Band Dipole Covers 160-80-40 meters with an overall length of only 100 ft. Antenna performance and 2:1 VSWR bandwidth is site dependent and varies with height above ground and surrounding objects. The typical bandwidth is:

160M – 20kHz • 80M – 40 kHz • 40M – 300 kHz

Full band coverage can be accomplished with an antenna tuner. Built with insulated #12 wire, stainless steel hardware and uses the Model DELTA-C static protected center insulator and CIN end insulators. Use with coax or open wire line and configure as a dipole or inverted-V. Assembled and ready to go! **\$119⁹⁹**

DX-LB PLUS Low Band Dipole Covers 160-80-40-20-15-10M. Overall length –100 ft **\$149⁹⁹**



DX-ULTRA Shortwave Dipole Antenna Covers AM Broadcast through 30MHz. Provides efficient, low-noise, broadband performance for Medium Wave, Tropical, International SW, Military, Government, Embassy, Maritime, Aircraft, Commercial and Utility frequencies. ISO-RES inductors, parallel wire elements and the exclusive DELTA-C Center Insulator with the built-in ARC-PLUG® Static Electricity Protector. Over all length is 80 ft.; may be installed as a dipole, inverted-vee, or full sloper. It can be used with an antenna tuner as a transmit antenna up to 2kW. Connectors will accept either coaxial cable or balanced line. Fully assembled, ready to go! . **\$119⁹⁹**

Antenna Hardware Kit



Don't assemble your next dipole without one of these CENTER/END insulator combos!

Designed for strength, and to provide equipment protection with a built-in replaceable SEP Arc-Plug® Static Electricity Protector. Ideal for dipoles, Vees, zepps and all kinds of SWL receive antennas. Feeds with either coax or balanced line. Rated for full legal power.

Dangerous static charges are developed from thunderstorms, high wind driven snow or desert sand, and have been measured to 1,000's of volts; so potent, they can puncture the dielectric of unterminated coax.

The SEP Arc-Plug protector mounted in the DELTA-C center insulator "bleeds off" slow rising static electricity charges, routing them harmlessly to ground, before they can enter the shack thru the feedline. This is far more effective than DC grounded baluns or chokes, which can be "popped" by static charges.

Both the DELTA-C Center Insulator and DELTA-CIN End-Insulators are made from an extremely rugged UV and RF resistant DELTALLOY material so tough that it can survive a drop off a roof without damage. Stainless steel hardware used in the center insulator for use in salt air and other corrosive environments, and all internal connections are hard soldered.

DELTA-C Antenna hardware kit Contains DELTA-C Center insulator, (2) end-insulators and a SEP ARC-PLUG Protector **\$29⁹⁹**

DELTA-CIN End-insulators (separate) ea. **\$1⁹⁹**

OUTbackerTM ANTENNAS

**HAM • MARS • CAP • MARINE/ITU
WIDE BANDWIDTH • LOW VSWR
NO COILS – JUST CHANGE THE TAP!**

The OutbackerTM – Constructed of fiberglass with pre-tuned copper helical windings and covered with smooth epoxy-resin and a coating of polyurethane for strength, and durability. The mounting ferule is nickel-plated brass with standard 3/8x24 threads.

Frequency coverage is broadbanded but the top whip section is adjustable which allows tuning for the lowest VSWR.

Tap points are clearly engraved for each band. Manually change bands by plugging the unique OUTBACKER "Wander lead" into the proper tap – for 75M the lead is removed entirely.

Sleek black finish, 8 models with optional spring/base, mount and cable.



Outbacker Model

OUTBACKER PERTH
OUTBACKER PERTH PLUS
OUTBACKER 8
OUTBACKER HP
OUTBACKER SPLIT
OUTBACKER TRI-SPLIT
OUTBACKER MARINER
OUTBACKER STEALTH PLUS
OUTBACKER Spring/Base
DIAMOND K-4003/8C
DIAMOND C-110

Description

75-10M + WARC, 150W P.E.P • 7.5 ft. tall • 3.5 ft. stinger retracts into the 4 ft. mast for garaging'
75-10M + 6 & 2M • 6 ft. tall • Perfect for HF + VHF radios: IC-706 Series, DX-70T Series, FT-100, etc.
75-10M, 300W P.E.P • 6 ft. tall
75-10M • HIGH POWER – 500W P.E.P rating • 6 ft. tall
75-10M, 300 W P.E.P • 6 ft. tall • Breaks down into two 3 ft. sections, comes with carrying pouch
Same as OUTBACKER SPLIT except breaks down into three 2 ft. sections, storage pouch included
Covers ITU Marine: 2.182, 4.1, 6.2, 8.2, 12.4, 16.5, & 22.1MHz and Ham bands: 75, 40, 20, 17 & 10M
75-10M + 6 & 2M • 4 ft. tall, 150W PEP • Perfect for use w/HF + VHF radios: IC-706, DX-70T, FT-100.
HEAVY DUTY • Nickel/zinc plated • 3/8-24 threads • SO-239 connector • Requires 1/2" mtg. hole
Diamond 3/8" x 24 thread trunk-lip mount with 6 ft. coaxial cable for all OUTBACKER models
Diamond 10 ft. extension cable for K-400-3/8C trunk-lip mount

AES Model

Price

Perth \$289⁹⁹
Perth Plus \$299⁹⁹
OB-8 \$279⁹⁹
OB-8HP \$299⁹⁹
OB-S8 \$299⁹⁹
OB-8TRI \$329⁹⁹
OB-M \$429⁹⁹
Stealth PLUS \$269⁹⁹
OB-SB \$99⁹⁹
DIA K400-3/8C \$69⁹⁹
DIA C-110 \$14⁹⁹

The OutreachTM...\$399⁹⁹

A complete efficient portable antenna system to meet the needs of those who have limited space or are deed restricted. Ideal for backyard, patio, woods or field day. Covers all bands from 160 thru 10 meters, providing an exceptional level of performance. The perfect companion for the Outpost Tripod mount. Black, heavy duty epoxy finish looks great! Slim design makes it nearly invisible to your neighbors.



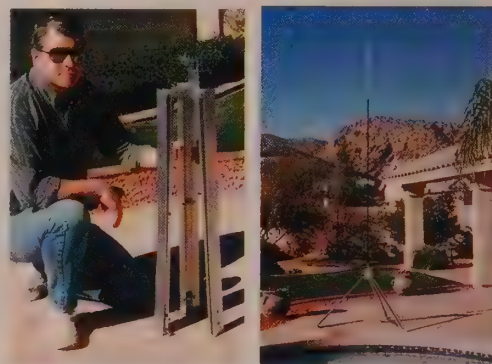
- Covers all amateur bands, 160 thru 10 meters
- Overall Length: 12 ft. • Weight: 4 lbs.
- Exceptional performance! 10, 12, and 15 meters are 5/8 wave – all bands are center loaded for peak performance.
- Rated at 300W PEP.
- Utilizes the time proven OUTBACKER® band tap system.
- Split 8 ft. shaft and 4 ft. stinger
- Breaks down into (2) 4 ft. sections for portability; comes with a protective carrying case.
- Terminates into a standard 3/8" x 24 threaded base.

The Outreach 500TM...\$439⁹⁹

The mechanical specifications are exactly the same as for the standard Outreach model, however it does not cover 160 meters, but includes 6 meters in addition to all other HF bands including the WARC bands. A band tap is provided for both 80 and 75 meters, allowing coverage of the entire 3.5 to 4.0 MHz range. Power handling capability has been increased to a robust 500W CW and 600W PEP SSB.

The OutrunnerTM...\$349⁹⁹

It's like the standard Outreach model, except its length is 9 ft. instead of 12 ft. It covers 160 thru 10 meters including WARC bands, but lower rated at 150 Watts PEP. It also has has a two-piece split shaft, and a 3 ft. stinger, and terminates into a standard 3/8" x 24 threaded base.



OutpostTM...\$199⁹⁹ Tripod/Ground Coupler Mounting System

- The fold-out legs and blades act as a large capacitor to improve ground coupling for a better impedance match and antenna efficiency
- Matches the base impedance of all OUTBACKERS
- Compact, fold-up design sets up quickly. Stands alone, no digging, no holes, no concrete. Collapse it, throw it in the trunk, take it with you!
- Fold-over top bracket. Mobile-type mount with SO-239 connector accepts a standard 3/8" x 24 stud. Antenna is easily removed or folded down for changing bands, or to be out of view when not in use.
- Constructed of aircraft 6061-T6 aluminum, stainless steel hardware and wing nuts. All assembled, no tools required. • Weight: 18 lbs



VRC-2



DH-1

VRC Variable Response Console – an advanced audio processing speaker system that enhances the reception capabilities of ANY receiver, transceiver or scanner. Exclusive custom designed ducted port bass reflex speaker system offers outstanding audio performance.

- Built-in low distortion, low harmonic push-pull audio amplifier.
- Adjustable 12dB Bass boost and cut circuitry enhances both Voice and Music. LED reads out in dB
- Adjustable sharp cut-off SCAF filter can be set for optimum interference reduction for any mode and any band condition – AM, FM, SSB, CW or data. LED light bar readout shows cut-off frequency.
- Peaking circuitry (20 dB) allows CW and Data signals to “pop” out of the background noise and interference.
- Continuously adjustable 40dB Deep Notch circuitry effectively takes out interfering heterodynes.

Model VRC Variable Response Console..... \$249⁹⁹

Model VRC-2 Ducted Port Bass Reflex Speaker
same as above, but no amplifier or filters.. \$99⁹⁹

DH-1 Hydraulically Dampened Fold-Over Fixture – allows easy installation or working on your vertical antenna from the ground without a ladder or the inconvenience of taking it up and down.

- Quick and easy raising and lowering. Great for the larger HF Verticals such as the R-8, R-6000, R-7000, DX-77, Patriot and others up to 29 ft. long.
- Hydraulic Module for safe assisted one-man operation.
- Stealth, unobtrusive – when lowered, the attached antenna rests steady in a horizontal position hidden from your neighbor's view.
- Bolts temporarily to a weighted board, or to a 16" square x 24" deep concrete base. Stainless steel hardware, no assembly required, weighs 33 lbs **Model DH-1 \$249.99**

Basic Technology for the Amateur Radio Enthusiast



A simple, straight forward Video and Book program that takes you on a journey, explaining the wonderment of the amateur radio hobby.

The 24-minute video illustrates radio fundamentals, and explains everyday electronic terms you'll hear relating to the hobby. You will even go with a miniature “tour guide” on a walk through a receiver printed circuit board. The guide will show you how amplification, power supplies, radio frequency and audio amplifiers and other parts of a radio work, and an explanation of what “semiconductors” are all about. Neither the video nor the book get into math or formulas – it's been kept simple.

The book is designed for the non-technical person interested in joining the hobby or the amateur operator who would like to know more about “what's behind the dials” and explains the fascination of the hobby in detail.

ALP BASIC TECH \$39.99

Console DELTA-4C Coaxial Switch



A Surge Protected antenna switch console designed to sit conveniently on your operating desk. Rear connector and console design prevents coax cables from pulling the console backward.

- 4 positions – switch multiple antennas to your station or multiple equipment to your antenna
- Retains the excellent performance features of the proven DELTA-4 switch series, using the same micro-strip channels, positive detent switching and excellent isolation between terminals
- Provides station surge protection with built-in ARC-PLUG gas tube module, easily replaceable front the front panel. All circuits are protected during operation, and unused positions are grounded. A master center “OFF” position grounds all circuits for maximum station protection at all times
- Built with a heavy 3/16 inch thick aluminum casting, 2.75 lbs
- Available with SO-239 or type-N connectors

Console DELTA-4C SO-239 connectors , 4 position \$139⁹⁹

Console DELTA-4CN Type N Connectors, 4 position \$149⁹⁹

KENT Paddles by ALPHA DELTA



Titanic Key

Reasons for Buying KENT Paddles:

- Delicate, smooth feel due to sealed ball bearings instead of simple spring-loaded pivots
- Free movement, minimum friction sideplay
- Precise gap alignments with instrument knurled heads on fine pitched screws and locking nuts.
- Rugged components made from machined, polished solid brass contained within a permanent brass housing.
- Silver contacts • Non-slip feet • Weighted for stability • Paddle models use heavy steel bases
- Designed and produced by R.A. Kent Engineers, England. Imported, fully assembled and tested by Alpha Delta.

Model SK-1 Straight Morse Key (top) \$129⁹⁹

Model SP-1 Single Paddle Morse Key (bottom/left) ... \$139⁹⁹

Model TP-1 Twin Paddle Morse Key (bottom/right).... \$149⁹⁹

TK-1 Titanic Morse Code Key ... \$149⁹⁹

Robert Kent of Kent Engineers in England did meticulous research on the code key that was used on the Titanic, and has produced a beautiful crafted machined brass, working replica to be marketed by Alpha Delta. Each key has a serial number, a matching certificate telling of the event, and are individually signed by Kent for authenticity. The key provides extremely smooth operation and is a great addition to any station or collector's desk.



BARKER & WILLIAMSON ANTENNAS and ACCESSORIES

603 Cidco Rd • Cocoa FL 32926

Tel: 321-639-1510 • Fax: 321-639-2545

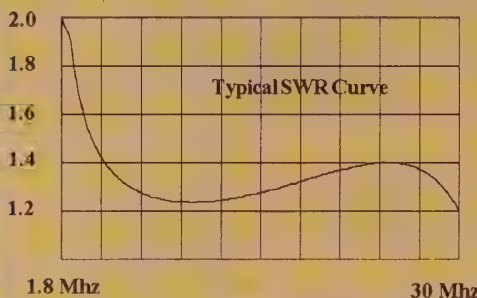
For more information, see our website at www.bwantennas.com

Cover the entire HF band with one antenna – The Easy Way

True Continuous Frequency coverage – 1.8 to 30 MHz.

These antennas are so unique that they even have a patent on them! They can offer operation over the entire HF band *without need for an antenna tuner*. Work any frequency you want without going through a lot of knob twirling and measurements to get a good SWR match – *just set your frequency and go!*

Tens of thousands of these antennas have been supplied to the US military, NATO, UN, Red Cross, and other similar agencies. They can be found on every continent in the world.



Broadband Folded Dipoles do it all!



- ✓ Unique Patented Design
- ✓ True Continuous Coverage
- ✓ 1.8 - 30 Mhz in Only 90 Ft.
- ✓ SWR less than 2:1 from 1.8-30Mhz
- ✓ No antenna tuner required

- Low Noise for Superior Receive
- 2 KW PEP SSB/CW ICAS
- #14 stranded Copperweld or Stainless wire
- 50 Ohm input with SO-239
- Comes completely assembled, only 10 lbs.
- Install as flat, inverted Vee, or sloper

AC-5-30 5.0–30 MHz, 65 ft., Copperweld wire **\$199⁹⁹**

BWD-1.8-30 1.8–30 MHz, 90 ft., Copperweld wire ... **\$199⁹⁹**

ACS-5-30 same, but Stainless Steel... **\$289⁹⁹**

BWDS-1.8-30 same, Stainless Steel.. **\$289⁹⁹**

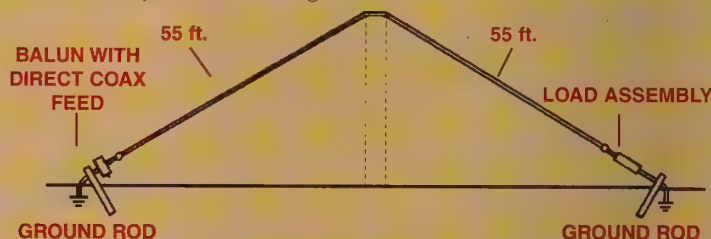
Trap Dipole Antenna Kits

Barker & Williamson dipoles are made from #14 stranded copperweld wire. All antennas will handle 1KW PEP. These dipoles may be installed as inverted "Vees" or horizontally.

Length	Bands	Description	Model	Shpg Weight
137 Ft 41.75 M	160 80 40 20	Low SWR on all bands. Three sets of traps isolate a full half wave on each band for superior performance.	AS-160 \$154.99	8 lbs 3.65 Kg
110 Ft 33.5 M	80 40 20 15 10	Low SWR on 80 and 40 meter bands, somewhat higher SWR on 20, 15 and 10 meters. Utilizes one set of traps.	AT-110 \$99.99	5 lbs 2.25 Kg
96 Ft 29.25 M	160 30	2 KW PEP. This antenna has one set of loading coils to allow 160 meters in very limited space.	AXS-160 \$99.99	6 lbs 2.72 Kg
78 Ft 23.75 M	80 40 20	Two sets of traps give low SWR on all bands. Excellent 80 meter coverage.	AS-80 \$119.99	6 lbs 2.72 Kg
65 Ft 19.8 M	80 40 15	A combination of one set of loading coils and one set of traps allows 80 meters in very limited space.	AXS-80 \$119.99	6 lbs 2.72 Kg
55 Ft 16.75 M	40 20 15 10	Four bands in only 55 ft. One set of traps gives efficient operation.	AT-55 \$87.99	5 lbs 2.25 Kg
40 Ft 12.2 M	40 20 15 10	Utilizing three sets of traps, this antenna has low SWR on all bands.	AS-40 \$154.99	7 lbs 3.18 Kg
20 Ft 6.1 M	20 15 10	For very tight spots, two sets of traps yield low SWR on all three bands.	AS-20 \$119.99	6 lbs 2.72 Kg

Broadband End-Fed Vee – 1.8 to 30MHz

All of the same unique broadband characteristics of our folded dipole antennas, except in a grounded configuration. Good for metal roof tops, and low to ground installations.



AC-1.8-30 with Copperweld wire..... **\$209⁹⁹**

ACS-1.8-30 with Stainless Steel wire..... **\$299⁹⁹**

NO YARD? DEED RESTRICTED? NO PROBLEM! WINDOW MOUNT/PORTABLE ANTENNA

2–40 METERS • 300 WATTS



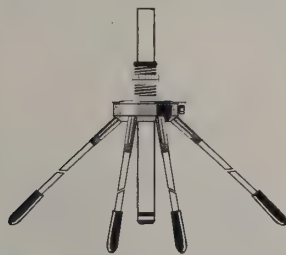
AP-10A Designed especially for people that cannot erect a permanent antenna. Easy tuning to *any frequency continuous* from 10–40M. Will also operate 2 and 6 M. Mounts to a window, table, balcony, etc. Base loaded unit includes telescopic whip, window mount bracket, single coil with fly-lead/clip, insulated counterpoise wire, 10 ft. of coax and hardware. Stainless steel whip collapses to 23 inches for easy transport.



A-99 10M Base Antenna with Twin Ring Adjust-A-Match Tuning Voltage-fed, half wave variable, mutual transfer inductance tuned antenna. It's economical and easy to use! The SOLARCON sealed base unit is tuned with external inductance rings. Impedance remains constant over the tuning range. Simple Tuning! Raising the tuning rings raises the frequency and lowering the rings lowers the resonant frequency.

Rugged, three-piece, white fiberglass construction with triple-plated brass fittings. It's easy to assemble and install. The optional GPK-1 ground plane radial kit makes it perform even better!

Three sections • 10 meters • 3 dBi gain • 2000W power limit • Radiation angle of <20° • DC ground mounting • 1½" mast • 52Ω coaxial cable • SO-239 connector • 17 ft. 8 in. length **\$64.99**



GPK-1 Groundplane Kit • 30% more power gain and lower angle of radiation for greater range • Kit includes 1 collar and 4 fiberglass radials. **\$39.99**

Lakeview Co., Inc.

WD4BUM HAMSTICKS® Two-Piece Monoband Mobile Antennas Hamstick 75 thru 10 meter models consist of a 47 inch long x 1/2 inch diameter fiberglass base section with the loading coil wound over its length and covered with black PVC shrink tubing. It's fitted on one end with a 3/8" X 24 brass base fitting that fits most amateur mobile mounts. A black 48 inch tempered stainless steel whip telescopes into the top of the base section and provides for frequency adjustment. The 6 meter model has a 34 inch base section and whip. Convenient frequency vs length graphs are included with the instructions.

If the antenna shows a SWR of 1.5 to 1 or better, no matching should be necessary. However, if it is, which may be especially true on 40 and 75m, you can capacitively match the base using values recommended in the instructions. If you frequently change bands you can use the **WD4BUM INDUCTO-MATCH (IM-1)** which consists of an impedance matching coil that simply installs at the base of the antenna. Using the supplied clip lead, you just tap up the coil for the best match.

Models
9106 (6M) **9110** (10M) **9112** (12M)
9115 (15M) **9117** (17M) **9120** (20M)
9130 (30 M) **9140** (40M) **9175** (75M)
 All Hamsticks.....each **\$24.99**
IM-1 Inducto-Match **\$12.99**

PAR

OMNIANGLE ANTENNAS



For 10m, 6m, 2m, 220MHZ and 440MHZ (FIXED or MOBILE). The perfect complement to high-gain directional arrays, allowing all-direction local work and monitoring for DX.

Outperforms halos, loops and turnstiles! It's considerably longer than a halfwave dipole, and coupled with the unique triangle shape, yields a horizontally polarized antenna whose pattern is within 0.8dB of being a perfect circle, and exhibiting wide bandwidth.

Rated at 150W, it's built-in matchbox and current balun allow feeding with 52Ω coax & easy tuning to desired frequency with a perfect match. The design virtually eliminates detuning due to moisture.

Stack two or four OMNIANGLES for 3 to 6dB omnidirectional gain and lower angle of radiation.

OA-28 10m, 28-30MHz **\$74.99**
OA-50 (bottom) 6m, 49.5-54MHz **\$63.99**
OA-144 (middle) 2m, 138-150MHz **\$54.99**
OA-222 222-224MHz **\$54.99**
OA-432 (top) 420-450MHz **\$54.99**

Stacking Harnesses for 2 OmniAngles (3dB Gain)
 - Made of Belden 8213 and silver/gold/teflon connectors, 70cm model uses N connectors.

SK-50 for OA-50 **\$36.99**
SK-144 for OA-144 **\$34.99**
SK-222 for OA-222 **\$34.99**
SK-432 for OA-432, type-N **\$54.99**



The Eavesdropper Shortwave Broadcast Receiving Antenna A 42 ft. long center-fed dipole with 8 automatic bandswitching trap circuits which electrically separate the antenna segments - just tune your receiver to the desired band. The Eavesdropper covers the 11, 13, 16, 19, 21, 25, 31, 41, 49, 60, 75 and 90 meter bands. Includes **The Zap-Trapper®** gas-tube lightning arrestor for receiver protection and 50 ft. of 450-pound test support rope. Completely assembled, ready to use. Two models:

EAVES TWIN with 100' of 72Ω twin lead **\$79.99**
EAVES SO239 with weatherproofed SO-239 coaxial center connector, coax not included **\$79.99**



UNADILLA

W2AU/W2VS 5-Band Antenna Kit Provides Low SWR on 80 and 40M and resonant performance on 10, 15 and 20M. Includes 40M traps, W2AU 1:1 balun, end insulators, 120' of #14 stranded copper wire and instructions. 110' long, rated 2KW PEP **\$85.99**



Shakespeare®



VHF MARINE ANTENNAS

4187 Ratchet Mount (above) Stainless steel. 4-way ratchet design with handle for deck or bulkhead mounting. Standard 1"-14 male threads. **\$36.99**

396-1 Center-fed 1/2 Wave Coaxial Sleeve Antenna Basic 3dB antenna designed to reduce signal fading when working in rough seas. Widely used by the Coast Guard. 5MHz bandwidth, 3dB gain, 50W • White Shakespeare fiberglass • Brass and copper elements • Deluxe chrome-plated brass ferrule • One section • 5 ft. length, 15' RG-58 cable with PL-259. Use 4187 ratchet mount **\$59.99**

420 SKIPPER™ Center-fed 1/2 Wave Coaxial Sleeve Antenna Economical, and a good basic 3dB antenna for steady, day-to-day cruising in calm to moderate seas. Includes a polycarbonate lift/lay deck mount, leveling plate and hardware. 5MHz bandwidth, 3dB gain, 50W • White Shakespeare fiberglass • Brass and copper elements • Polycarbonate ferrule • One section • 5 ft. length, 15' RG-58 cable with PL-259 **\$59.99**

5101 Centennial™ End-fed Antenna with Matching Stub High-end features in an 8' antenna with a brass element and a smooth, high gloss, polyurethane finish that won't turn yellow in the sun. 5MHz bandwidth, 6dB gain, 50W • One section • Brass and copper elements • Chrome-plated brass ferrule with standard 1" x 14 thread • Includes 15 ft. RG-58 cable and a PL-259 coaxial connector. Use with 4187 ratchet mount **\$49.99**

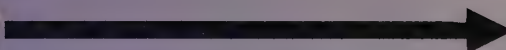
5206-C End-fed Antenna with Matching Stub Economical, lightweight and self-supporting antenna for good communications where range is not the predominant factor. 3MHz bandwidth, 6dB gain, 50W • White Shakespeare fiberglass • Chrome-plated brass ferrule • One section • DC grounded • 8' length, 15' RG-58 cable with PL-259. Use with 4187 ratchet mount **\$39.99**

5202 Collinear-phased 5/8 Wave Elements A rugged, professional quality antenna featuring a heavier duty radome and tough brass and copper construction for maximum efficiency and extra range. 3MHz bandwidth, 6dB gain, 50W • White Shakespeare fiberglass • Chrome-plated brass ferrule • One section • DC grounded • 8' length, 20' RG-58 cable with PL-259. Use with 4187 ratchet mount **\$69.99**

DIAMOND ANTENNA

D-130J Super Discone Antenna Ultra-wideband - covers amateur, air traffic control and other utility bands. Major component parts are stainless steel. Receive: 25-1300 MHz, transmit: 100-1300 MHz - 50-54MHz is tunable • Handles 200W 100-1300MHz; 50W at 50 MHz • Mounting brackets supplied • 66.9" h, 2.2 lbs. **\$89.99**



Go Mobile, get there with  **COMET!**

Build your own antenna mounting system with the lip mounts and cable assemblies below.

Choose a Lip Mount



RS-730
Multi-adjustable heavy duty lip mount, up to 70" antenna

RS-720 • RS-720 NMO
Multi-adjustable lip mount, up to 60" antenna RS-720 NMO accepts an NMO mount

RS-520
Multi-adjustable lip mount, up to 45" antenna

Choose a Cable Assembly



3D5M Standard low loss cable assembly, Gold plated SO-239/PL-259 connectors. 17' length

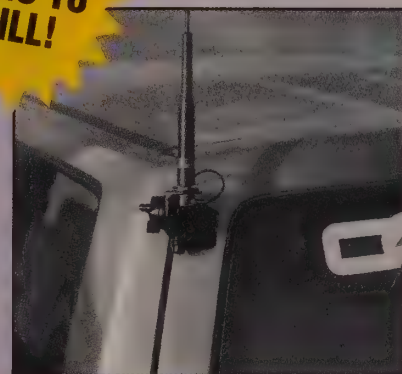
3D4M Same as 3D5M, but 13.5' length



CK-3M5 Deluxe cable assembly 17' length including 17" of RG-188A/U for easy entry from a lip mount without causing water leak, wind noise or coax damage
CK-3M Deluxe cable assembly same as CK-3M5, but 9'9" total length

Create an antenna mounting system just for your vehicle!

Attach the chosen mount to the trunk, door, hood, hatch or rear door of your car, van or SUV. Any lip 1/4" or less in thickness will do. Tighten the setscrews and adjust the mount to vertical. **Installation takes only a few minutes.**



NO HOLES TO DRILL!

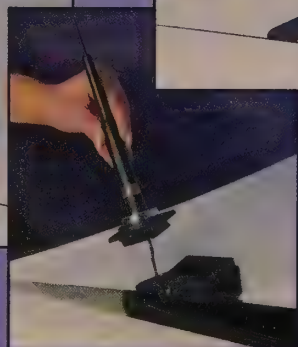
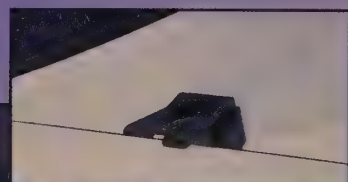
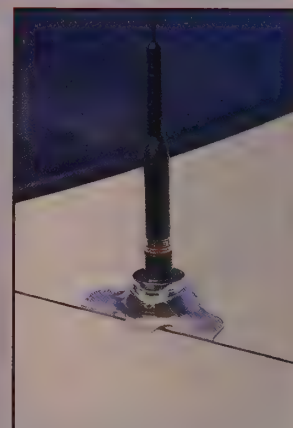
Additional available mounting assemblies with cable included!



CQ-5M
Deluxe "Quick-Disconnect" trunk lip mount with CK-3M5 cable included. With a flip of a lever, the antenna and coax are easily removed and stored in the trunk for car washes, theft prevention or any reason.



GR-5M
Deluxe stainless steel trunk lip mount with CK-3M5 deluxe cable included. Fully adjustable.



A 106

B

C

COMETTM



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SERIES***

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Use NCG/COMET products,
and enjoy amateur radio
to it's fullest!



NEW MH-209SMA • Dual-band 146/446MHz HT Antenna w/SMA Conn
Gain & Wave: 0 1/4 wave • Length: 3' Flexible rubber • Conn: Male SMA • Max Pwr: 5W

NEW SMA-503 • Dual-band 146/446MHz HT Antenna w/SMA Conn
Length: 8.75' • Conn: Male SMA • Max Pwr: 10W

NEW MH-510 • Tri-band 52/146/446MHz HT Antenna w/SMA Conn
Gain: 0/0/ 3.2dBi • Length: 20.75' • Conn: Male SMA • Max Pwr: 10W

SB-15 • Tri-band 52/146/446MHz w/fold-over
Gain & Wave: 52MHz 0dBi 1/4 wave • 146MHz 4.5 dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: PL-259 • Max Pwr: 120W

NEW BLACK COLOR

SBB-7 SBB-7NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 4.5dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: SBB-7 PL-259/SBB-7NMO NMO • Max Pwr: 70W

NEW BLACK COLOR

SBB-5 SBB-5NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.5dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 2 • Length: 39" • Conn: SBB-5 PL-259/SBB-5NMO NMO • Max Pwr: 120W

THEFT **Z750** • Dual-band 146/446MHz w/fold-over • Includes COMET exclusive theft-resistant lock!
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 2 • Length: 39" • Conn: Gold-plated PL-259 • Max Pwr: 200W

THEFT **Z780** • Dual-band 146/446MHz w/fold-over • Includes COMET exclusive theft-resistant lock!
146MHz 6/8 wave 4.5dBi • 446MHz 5/8 wave x 3 7.2dBi • Length: 62" • Conn: Gold-plated PL-259 • Max Pwr: 150W

- The CA-UHV is a 6M/2M/70cm triband antenna. Add 2-3 of the stock or optional coils for 5-6 band operation.
- HF-70cm all in one economical easy to mount antenna.
- Fold-over hinge built in.
- Select the correct duplexer or triplexer for your specific radio (s).
- CF-706A, CF-530, CFX-514N (Ask your dealer)

B-20 B-20NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 446MHz 5.0dBi 5/8 wave x 2 • Length: 30" • Conn: B-20 PL-259/B-20NMO NMO • Max Pwr: 50W

B-10 B-10NMO • Dual-band 146/446MHz cellular look-a-like •
Gain & Wave: 146MHz 0dBi 1/4 wave • 446MHz 2.15dBi 1/2 wave • Length: 12" • Conn: B-10 PL-259/B-10NMO NMO • Max Pwr: 50W

NEW CA-UHV • HF/6M/2M/70cm Mobile Antenna 40/*20/*17/15/10/6/2M/70cm **40M Thru 70cm!**
Gain & Wave: HF-6M 1/4 wave • 2M 3.4dBi 5/8 wave • 70cm 2.15dBi 1/2 wave • VSWR: HF 1.6:1 or less • 6M-70cm 1.5:1 or less • Length: 6'2" • Max Pwr: HF 120W SSB • 6M 200W SSB/100W FM • 2M/70cm 100W FM • *L-14 Optional 20M coil • *L-18 Optional 17M coil

***NEW MSG-1000C** • Dual-band 146/446MHz w/spring whip
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 2 • Length: 39" • Conn: PL-259 • Max Pwr: 120W

***NEW MSG-1100C** • Dual-band 146/446MHz w/spring whip
Gain & Wave: 146MHz 3.5dBi 1/2 wave • 446MHz 6.0dBi 5/8 wave x 2 • Length: 43" • Conn: PL-259 • Max Pwr: 150W

COMET™

*NCG Product

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Do the math!



2:1 Bandwidth (kHz)

40M	... 150
30M	... >50
20M	... >350
17M	... >100
15M	... >450
12M	... >100
10M	... >1500
6M	... >1500

6
10
12
15
17
20
30
40

Meter Vertical Antenna

For more information on this outstanding HF Multiband Vertical Antenna, visit our web site at:

<http://www.cushcraft.com>
or contact any one of our dealers worldwide.

Rig+Amplifier+Tuner+R8=Performance

What happened to the multiband vertical antenna? For years, multiband verticals with their own counterpoise systems have been the answer for operators in need of a single omnidirectional antenna capable of working all of the desired bands within a small footprint. They were compact, easy to install and didn't require radials making them the perfect choice in many instances.

What happened?? The tuner is what happened. Thanks to the tuner, Hams are now capable of running more mismatched power from their solid state rigs to their antennas than ever before. Although the tuner has obvious merits, combining eight HF bands into thirty odd feet of antenna does not come without some concessions to the laws of physics. Clearly, the ability to tune across the bands combined with an amplifier adds new elements to the traditional multiband vertical equation.

The R8 is the obvious answer. The R8 will allow you to safely run a 3.0:1 VSWR mismatch at 1500 watts CW without damaging its sophisticated components*. The antenna is also quite broadbanded and is less likely to be as sensitive to its surroundings. Equally important, the antenna only has two traps that have been designed to virtually eliminate damage due to moisture induced arcing.

Call your dealer and order one today! The end result will be another equation that you will grow to appreciate.

The R8 = operating confidence, versatility and fun.

* Check VSWR graphs for actual 2.0:1 VSWR bandwidth.



CUSHCRAFT
COMMUNICATIONS ANTENNAS

48 PRIMETER ROAD, MANCHESTER, NH 03103 US
(Tel.) 1-603-627-7877 • (Fax) 1-603-627-1764

INTRODUCING R6000



6 - 20 Meters

The Shape of Things to Come

The NEW R6000 is a 6 through 20 meter, no ground radial antenna. It includes many of the features of the R7000, R7 and R5 antennas. R6000 means excellent performance, easy installation and use, slim silhouette and high reliability. There are no traps used on 6, 10 and 15 meters for maximum efficiency and power handling.

- EASY INSTALLATION**

For typical use, tuning is not required

- AUTOMATIC BAND CHANGING**

To any band 6 through 20 meters

- SLIM SILHOUETTE**

Gain favor of family and neighbors with the slim, low profile of the R6000

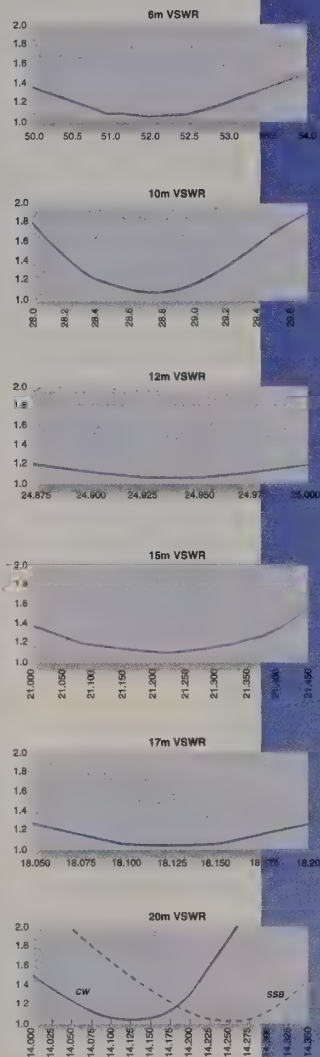
- 6 METER OPERATION**

Join the fun of the "Magic Band" and take advantage of the new HF/50MHz transceivers

- AFFORDABLE PRICE**

Cushcraft delivers the best quality and performance at a price no one else can match.

SPECIFICATIONS	R6000
Frequency, meters	6, 10, 12, 15, 17, 20
Gain, dBi	3
VSWR minimum	1.2:1 typical
2:1 bandwidth, KHz	6m >1300 10m >1700 12m >100 15m >450 17m >100 20m 300
Power, Watts output	1500
Radiation angle, deg.	16
Horizontal rad, deg	360
Height, ft (m)	19 (5.8)
Mast size range, in (cm)	1.5 -1.75 (3.8-4.4)
Wind load, ft ² (m ²)	1.5 (.14)
Weight, lb (kg)	12.5 (5.6)



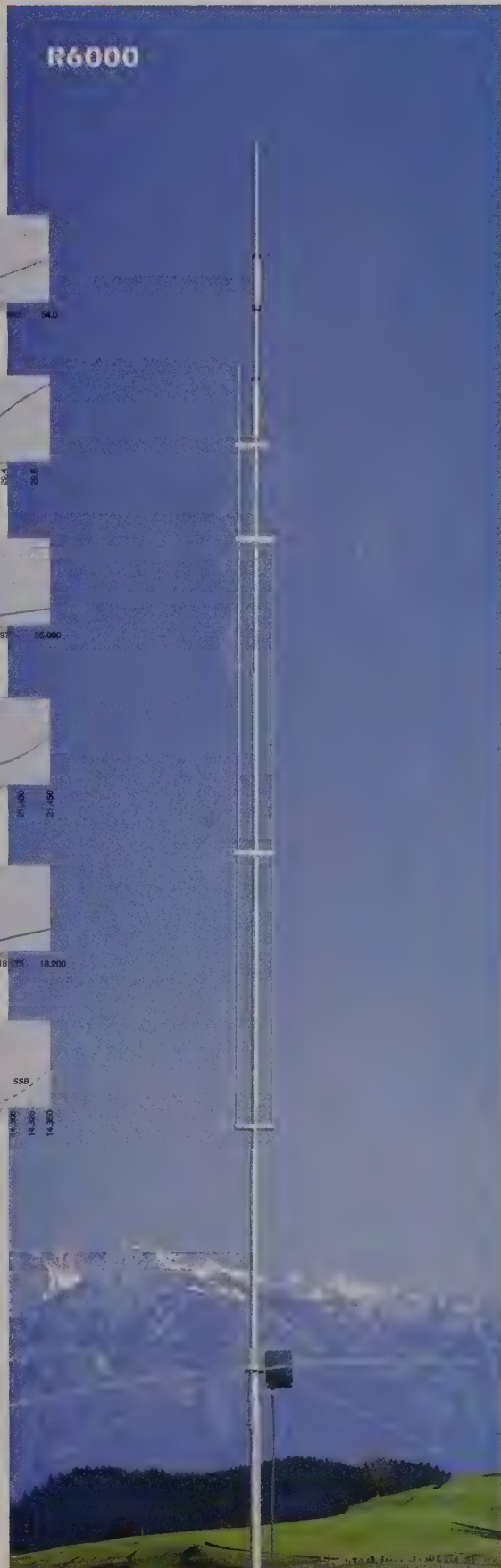
The R6000 employs quarter wavelength stubs on 10 and 15 meters to replace standard trap coils. The result is lower loss and wider bandwidth. The R6000 covers all bands 6 through 15 meters at a VSWR under 2:1. On 20 meters you can select the top 300 KHz or bottom 300 KHz of the band.

The R6000 weighs only 12-1/2 pounds (5.6 kg). It is lightweight and easy to mount for portable or permanent installations. Machined aluminum clamps and UV stable insulators guarantee years of reliable service. The R6000 comes with the standard Cushcraft warranty of one year from purchase - plus the industry's leading technical support team stands behind each Cushcraft antenna.

The R6000 makes an excellent diversity antenna to complement even the most complete stations. Or pack up the R6000 for a trip to the DX location of your dreams. With sunspots on the rise, amateurs worldwide are returning to the HF bands in large numbers. The R6000 will take you there first class for the exciting years ahead.

CUSHCRAFT

Cushcraft Corporation, Manchester, NH



BIG THUNDER SERIES TRIBANDERS

10, 15, 20 Meters

X9 & X7

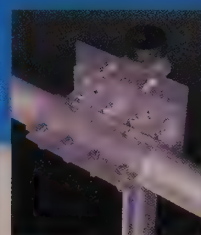
The new X9 and X7 Triband Yagis are geared to set new standards in both radiating performance and mechanical reliability. Cushcraft's product development team has employed the latest computer modeling technology to achieve a superior electrical design as well as elegant new mechanical hardware and assembly techniques.

Each mechanical component was designed to 100+ MPH wind survival with a 1.25 safety factor.

Traps were eliminated from the high current driven elements and reflectors using the new *4L Log Cell* design, which yields virtual monoband performance and maximum power handling capability. Traps are employed only in the lower current directors for increased gain and sharper pattern. The result is a truly high performance antenna family which will easily handle the legal limit.



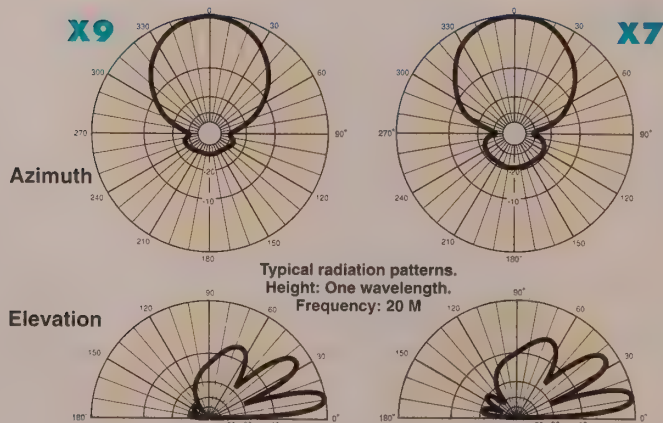
Boom to Mast Clamp



Element to Boom Mounting

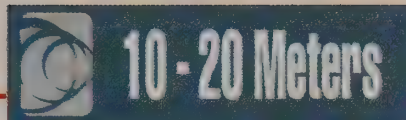


- ▶ **New High Efficiency Computer Optimized Design for Maximum Gain and Ultra Clean Radiating Pattern**
- ▶ **100+ MPH Construction for Best Reliability and Long Life**
- ▶ **NEW 4L Log Cell Driven Elements for better VSWR Bandwidth**
- ▶ **Trapless Driven Elements and Reflectors for Reliable Power Handling**
- ▶ **Interleaved Element Design for Mono-Band Performance**
- ▶ **Add-on kits available for 40 Meters**



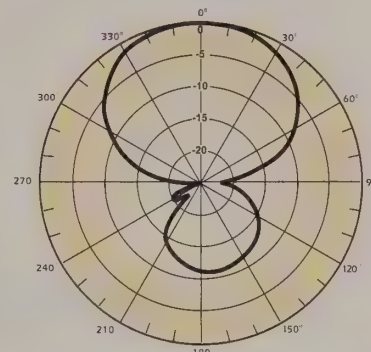
SPECIFICATIONS	X9	X7
Frequency Coverage (Meters)	10, 15, 20	10, 15, 20
Total number of Elements	9	7
Maximum Gain (dBi)		
@ One Wavelength	20M 13.0 @ 14 deg 15M 13.9 @ 12 deg 10M 14.0 @ 15 deg	12.5 @ 14 deg 13.0 @ 12 deg 12.9 @ 14 deg
Maximum Front to Back Ratio (dB)	30	30
Number of Elements per Band	4	3
VSWR Minimum	1.1:1	1.1:1
VSWR 1.5:1 Bandwidth (KHz)	20M 350 15M 450 10M 1500	600 750 1700
Longest Element, ft (m)	36.5 (11.12)	37.2 (11.33)
Turning Radius, ft (m)	21.7 (6.61)	20.0 (6.09)
Boom Length, ft (m)	28 (8.53)	18 (5.49)
Boom Diameter, in (cm)	2-1/2 (6.35)	2-1/2 (6.35)
Maximum Mast Diameter OD, in (cm)	2-1/2 (6.35)	2-1/2 (6.35)
Maximum Wind Survival, mph (kph)	>100 (>161)	>100 (>161)
Maximum Wind Surface Area, ft ² (m ²)	9.9 (.92)	7.9 (.73)
Windload @ 80 mph, lb (kg)	255 (116)	202 (92)
Maximum Power Handling (KW)	2	2
Weight, lb. (kg)	85 (38.5)	60 (27.2)

HF MULTIBAND BEAM



- **Easy To Tune**
No complicated gamma matches to adjust.
- **Easy To Turn**
With a boom length of 7 feet and a longest element length of 17 feet, a lightweight TV rotor will do the trick.
- **Low VSWR**
Flat response across all 5 bands. VSWR minimum 1.2:1.
- **Single Feed Point**
Only one coaxial feed line is necessary for all 5 bands.
- **Rugged Construction**
Cushcraft's tried and true stainless steel mounting hardware and heavy wall aluminum tubing make for a rugged, long lasting antenna.

High Front To Back Ratio
On 10/15/20m

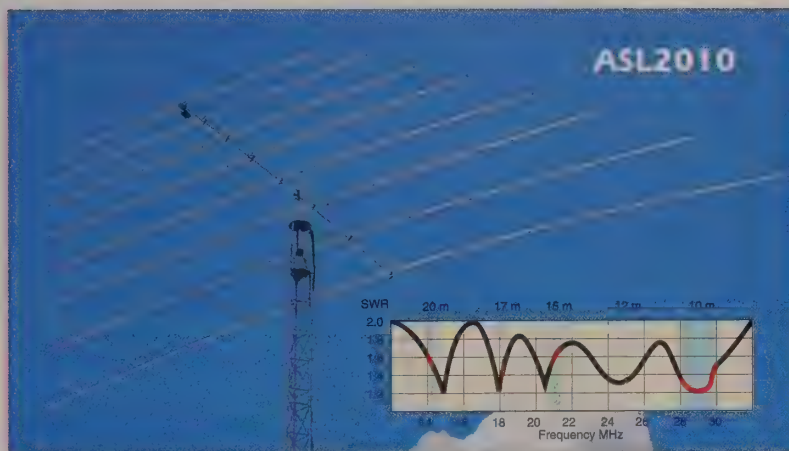


MA5B SPECIFICATIONS

	10	12	15	17	20	Meters
Frequency, MHz	2	1	2	1	2	per band
Elements	5.3	1.0	4.8	1.0	3.6	dBi
Gain	10	0	12	0	22	dB
Front to Back Ratio	25	25	25	25	25	dB
Sidelobe Attenuation	665	>110	255	>100	90	kHz
VSWR 2:1 Bandwidth	17.1ft (5.2m)					
Longest Element	8.8ft (2.7m)					
Turning Radius	7.3ft (2.2m)					
Boom Length	1.5in (3.8cm)					
Boom Diameter	3.22 ft ² (3m ²)					
Max. Wind Surface Area	1.2 kw					
Max. Power Handling	26.5 lbs. (12kg)					
Weight						

The Director, Small Footprint-Big Signal

MA5B. Cushcraft's newest multiband HF antenna provides 5 band directivity in a package small enough to mount to a tripod. The MA5B is a design that does not sacrifice ruggedness, performance and power handling for size and ease of installation.



Skylog

- Continuous five band coverage from 13.5 to 32 MHz
- Constant over entire frequency range
- 6.4 dBi gain, 65 degree beamwidth
- High efficiency design, antenna stays cool and VSWR steady
- 18 foot boom and 19.5 foot turning radius

MODEL

	ASL2010
Frequency, MHz	13.5-32
No. Elements	8
Forward Gain, dBi	6.4
Front to Back Ratio, dB	15-20
SWR 1.2:1 Typical	
2:1 Bandwidth	18.5 MHz
Power Rating, Watts PEP	2000
3dB Beamwidth, Degrees	
E Plane	65
Boom Length, ft (m)	18 (5.48)
Boom Diameter, in (cm)	2.0 (5.08)
Longest Element, ft (m)	38 (11.58)
Element Ctr Dia., in (cm)	1.25 (3.18)
Turning Radius, ft (m)	19.25 (5.86)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)
Wind Load, ft ² (m ²)	10.1 (.93)
Weight, lb (kg)	55 (25.5)

The ASL2010 log periodic antenna is the most cost effective, high gain, five band antenna solution on the market today. Skylog offers continuous operation from 13.5 to 32 MHz. Antenna gain and beamwidth are constant for uniform coverage from 10 through 20 meters. The ASL2010 is rated for continuous duty at full legal power. Skylog is designed for maximum gain on a manageable 18 foot boom with only 10.1 square feet of wind surface area. All stainless steel hardware and rugged element design are only some of the many features that provide years of superior antenna performance. Skylog ASL2010 is the smart choice for multiband HF operation.

CUSHCRAFT



10-40M

WORLD RANGER MULTIBAND HF YAGIS

A4S Four Element Beam - 10, 15 & 20 Meters

With stainless steel hardware.

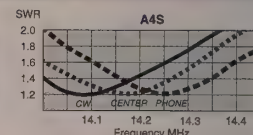
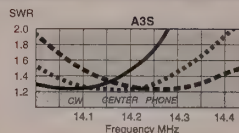
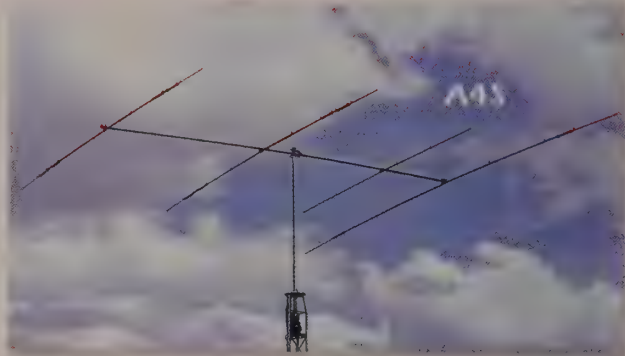
The A4S is the true, high performance tribander. Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make the A4S the preferred antenna for your HF work! This is the premium antenna with all the features that you want. High gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps and hardware are stainless steel. The A4S has pinned boom sections and formed aluminum brackets to keep elements straight under all conditions. Our solid construction keeps the A4S on the tower! Add 40 meters with A744 kit.

A3S Three Element Beam - 10, 15 & 20 Meters

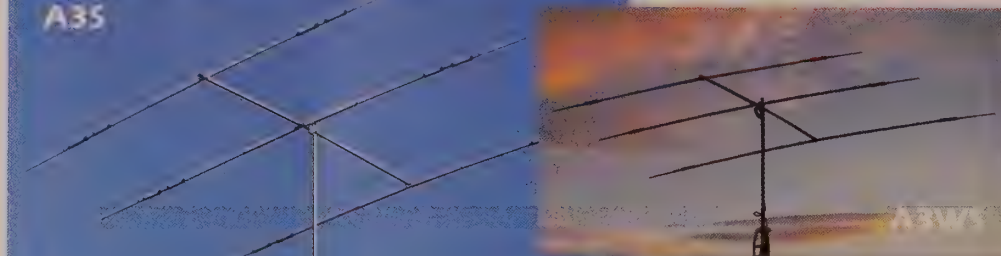
With stainless steel hardware.

The A3 World Ranger, our top selling tribander, has become the A3S with all stainless steel hardware. It's a real power-house in a small space and lets you work the pile-ups with confidence. All you need is a lightweight tower and rotator to enjoy the benefits of the A3S. It's a proven performer in DX-peditions and contests and handles full power from your linear.

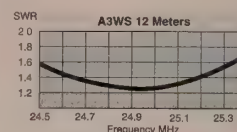
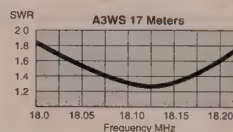
Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware. When space is at a premium, but you want the benefits of a full-size tribander, the A3S is right for you! Add 40 meters with A743 kit.



A3WS WARC Bands 3 Element - 12 & 17 Meters



Enjoy the excitement of the WARC bands with this popular beam. The A3WS gives full performance on 12 and 17 meters. With the addition of our easy-to-use A103 add on kit, it will also cover 30 meters. A3WS needs only a lightweight tower and rotator or you can mount it above an existing tribander. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware.



MODEL	A4S	A3S	A3WS
Frequency, MHz	28, 21, 14	28, 21, 14	24, 18
No. Elements	4	3	3
Forward Gain, dBi	8.9	8.0	8.0
Front to Back Ratio, dB	25	25	25
SWR 1.2:1 Typical			
2:1 Bandwidth KHz	>500	>500	300
Power Rating, Watts PEP	2000	2000	2000
3 dB Beam Width, Deg. E Plane	58	60	60
Boom Length, ft (m)	18 (5.48)	14 (4.27)	14 (4.27)
Boom Diameter, in (cm)	2 (5.10)	1.5 (3.81)	1.5 (3.81)
Longest Element, ft (m)	32 (9.75)	27.75 (8.45)	25.1 (7.66)
Element Center Dia, in (cm)	1.25 (3.18)	1.25 (3.18)	1.25 (3.18)
Turning Radius, ft (m)	18.4 (5.49)	15.5 (4.72)	14.4 (4.4)
Mast Size Range, in (cm)	1.25-2.00 (3.18-5.08)	1.25-2 (3.18-5.08)	1.25-2 (3.18-5.08)
Wind Load, ft ² (m ²)	5.50 (0.51)	4.36 (0.47)	4.1 (0.38)
Weight, lb (kg)	37 (16.8)	27 (12.9)	22.5 (10.2)

30 & 40 Meter Add-On Kits - For A3S, A4S & A3WS

40 meters will come alive by adding one of these kits to the dipole of your A3S or A4S. The kits include high power traps with heavy wall fiberglass insulator and all hardware. A simple adjustment allows 30 meter operation. For our newest beam, the A3WS, we have a 30 meter add on kit the A103.

- A743** 7 MHz/10 MHz kit for A3S
- A744** 7 MHz/10 MHz kit for A4S
- A103** 10 MHz kit for A3WS

MODEL	A743/A744	A103
BAND	7 MHz (40 m) 10 MHz (30m)	10 MHz (30m)
Driven Element with Adapter kit, ft (m)	33.19 min. 27.12 min. 35.33 max. 28.4 max.	32.1
	(10.12-10.77) (8.27-8.66)	(9.8)
Windloading ft ² (m ²)	.58 (.05) .27 (.03)	.45 (.04)
Bandwidth, KHz	125 150	250
Power Rating, Watts	2000 PEP 2000 PEP	2000 PEP
Side Rejection, dB	20 20	20
Weight, lb (kg)	3.44 (1.56) 2.29 (1.04)	3.25 (1.47)

Rotatable Dipoles

Our World Ranger Dipoles give bi-directional patterns and rotatable convenience. You can mount them high and away from the trees for better performance than a wire dipole. These single and multi-band dipoles feature high-performance traps, heavy wall tubing, and rugged hardware for years of enjoyment.



MODEL	D40	D4	D3	D3W
Frequency, MHz	7	28,21,14,7	28,21,14	24,18,10
SWR 1.2:1 Typical				
2:1 Bandwidth, KHz	200	>350 40>125	>500	>200
Power Rating				
Watts PEP	2000	2000	2000	2000
Length ft	42.25	35.8	25.8	34.0
(m)	(12.88)	(10.92)	(7.86)	(10.37)
Mast Size, in (cm)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)
Wind Load, ft ² (m ²)	1.3 (.12)	1.3 (.12)	.9 (.08)	.9 (.08)
Weight, lb (kg)	12 (5)	13 (6)	9 (4)	11 (5)

CUSHCRAFT

MULTIBAND DIRECTIONAL YAGI

6/2 Meter, 70 CM,

A627013S

A627013S

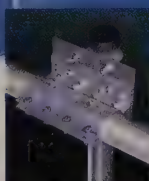
6Meter/2Meter/70 CM

Cushcraft's newest multiband directional yagi is designed to provide hobbyists who have limited tower or mast space with directional antenna performance on three of the most popular bands. The A627013S combines 6 meters, 2 meters and 70 centimeters on one boom. Since the three antennas were designed to share a common boom, the A627013S solves the often encountered problem of degraded antenna performance due to inadequate spacing when using separates.

MODEL	A627013S		
Frequency, MHz	50-54	144-148	430-450
No. Elements	3	5	5
Forward Gain, dBi	8	10	10
Front to Back Ratio, dB	20	20	18
SWR 1.2:1 Typical			
2:1 Bandwidth, MHz	>1	>4	>10
Power Rating, Watts PEP	1000	350	350
3dB Beamwidth, Degrees			
E Plane		48.5	48.5
H Plane		60	60
Boom Length, ft (m)		8.66 (2.66)	
Longest Element, in (cm)		117 (300)	
Turning Radius, ft (m)		6.16 (1.87)	
Mast Size Range, in (cm)		1.25-2 (3.2-5.1)	
Wind Load, ft ² (m ²)		2.52 (0.23)	
Weight, lb (kg)		9.5 (4.3)	

- Outstanding performance thanks to Cushcraft's unmatched multiband design technology and experience.
- Rugged stainless steel mounting hardware is easy to install and maintain.

XM510



Boom-to-Mast



Element Hardware

Big Thunder Monobanders

XM240 - 40 Meter 2 Element Yagi. The famous 402CD two element 40 meter beam is now redesigned as the XM240. It features the same contest winning performance with a 90+ mph wind rating. A 2-1/2" OD boom and Big Thunder style 3/16" thick extruded element and boom plates are used to eliminate mechanical failures. A Phillystran boom truss and 1:1 high power balun are included.

XM - 10, 15 & 20 Meter 5 Element Yagis. Cushcraft announces new 5 element Monobanders for 10, 15 & 20 meters. Each XM model has Big Thunder hardware and high wind ratings. Phillystran boom trusses are used on the 20 meter model. The feed systems are 50 ohm direct feed - dual driven elements. VSWR is flat across the band. A high power 1:1 balun is included. Big Thunder Monobanders were Beta tested at three extreme bad weather sites for the winter 1997/1998 season. They have excellent patterns and are perfect for stacks.

MODEL	XM240	XM520	XM515	XM510
Frequency, MHz	7.0 - 7.3	14.0 - 14.35	21.0 - 21.45	28.0 - 29.7
Number Elements	2	5	5	5
Forward Gain Free Space, dBi	6.0	9.3	9.3	9.3
Fwd Gain @ 1 Wavelength Ht, dBi @ 14 deg	12.5	14.4	14.4	14.4
Front to Back Ratio, dB	20-25	20-30	20-30	20-30
VSWR Typical Minimum	1.1:1	1.1:1	1.1:1	1.1:1
VSWR 1.5:1 Bandwidth, KHz	150	> 350	> 450	> 750
Power Rating, Watts Output	1500	1500	1500	1500
3dB Beamwidth, Degrees	70	52	52	52
Side Lobe Attenuation, dB	>35	>40	>40	>40
Boom Length, feet (m)	22 (6.7)	35 (10.7)	24 (7.3)	19 (5.8)
Boom Diameter, inches (cm)	2.5 (6.3)	2.5 (6.3)	2.5 (6.3)	2.5 (6.3)
Longest Element, feet (m)	43 (13.1)	36.3 (11.1)	24 (7.3)	18 (5.5)
Turning Radius, feet (m)	24.3 (7.4)	25.9 (7.9)	16.3 (5.0)	13.8 (4.2)
Max Mast Size, inches (cm)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)
Wind Surface Area, sq ft (sq m)	5.5 (.51)	9.2 (.85)	4.5 (.41)	3.4 (.32)
Wind Load @ 80 mph, lbs (kg)	142 (64.4)	250 (113.4)	115 (52.3)	78 (35.5)
Weight, lbs (kg)	55 (25)	92 (41.8)	47 (21.1)	38 (17.2)

CUSHCRAFT

DUAL BAND RINGOS & YAGIS

70 CM, 2 Meters

Cushcraft is the leader in dual band antennas. Our verticals provide excellent coverage at a price below the competition. The AR270 and AR270B are favorites with the AO27 crowd. For increased coverage, our dual band Yagis lead the way. Both Yagis require only one coax feedline for true dual band performance.

AR270B 5.5/7.5 dB Dual Band Ringo

This model gives very high gain with a low angle of radiation and it is only 7.7 feet (2.35 m) high. The AR270B is computer optimized with two 5/8 wavelength collinear elements on 2 meters and four 5/8 wavelength elements on 70 cm. It is broadbanded for minimum SWR on both bands. It is easy to assemble with three rugged aluminum tubing sections, a durable mast mount and factory sealed coils for best performance.

AR270 3.0 / 5.5 dB Dual Band Ringo

The "Dual Wonder" AR270 is only 3.75 feet (1.1 meters) high. It has great performance for its size, making it the most popular 2m/70 cm base antenna.

MODEL	AR270		AR270B	
Frequency, MHz	144-148	430-450	144-148	430-450
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	>4	>15	>4	>15
Gain, dBi	3.0	5.5	5.5	7.5
Power, Watts FM	250	250	250	250
Horizontal Radiation				
Pattern, Degrees	360	360	360	360
Height, ft, (m)	3.75 (1.13)		7.7 (2.3)	
Mast Size Range, in	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Radial Length, in (cm)	6.75 (17.1)		6.75 (17.1)	
Wind Load, ft ² (m ²)	0.27 (0.03)		0.47 (0.044)	
Weight, lb (kg)	2 (0.9)		2.4 (1.09)	



A27010S and A2706S

10 and 7.8 dB Dual Band Yagis

Increase your range by selecting one of the new Cushcraft dual band Yagis on 2 meters and 70 cm. You can point the antenna at stations while you are in QSO with them. This will direct more of your output power when transmitting at the same time reducing interference and increasing signal strength when receiving. These antennas are perfect for packet applications. Assembly is a snap with our fully illustrated assembly manuals.

Cushcraft pioneered dual band side-by-side Yagis. The harmonic relationship of 2 meters and 70 cm allow clean radiation patterns with minimal interaction.



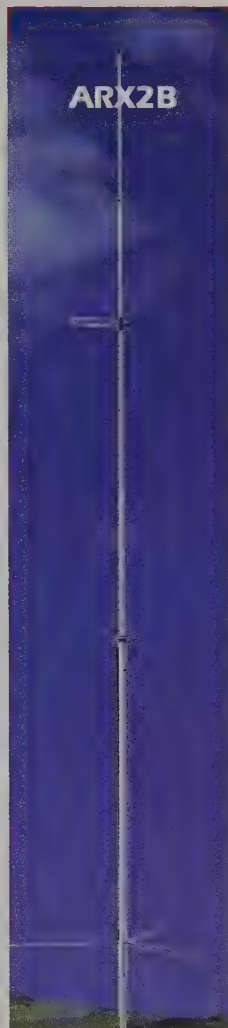
MODEL	A27010S		A2706S	
Frequency, MHz	144-148	430-450	144-148	430-450
No. Elements	5	5	3	3
Forward Gain, dBi	10	10	7.8	7.8
Front to Back Ratio, dB	20	18	20	18
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	≥4	≥10	≥4	≥20
Power Rating, Watts PEP	350	350	350	350
3dB Beamwidth, Degrees				
E Plane	52	52	66	66
H Plane	60	60	108	108
Boom Length, ft (m)	6.17 (1.9)		2.8 (.85)	
Longest Element, in (cm)	40.3 (102.4)		41 (104.1)	
Turning Radius, ft (m)	6 (1.8)		2.8 (.85)	
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Wind Load, ft ² (m ²)	.725 (.07)		.3 (.02)	
Weight, lb (kg)	1.8 (.81)		1.7 (.8)	

CUSHCRAFT

RINGO RANGER II, RINGO RANGER, RINGO



70 CM, 1 1/4 M, 2 M



Some hams comment on the ARX2B:

"Since I put this antenna up I have received many compliments on the improvement of my signal." (N3LHP)

"The only antenna I ever installed that worked like it should the first time." (N7PGH)

"ARX2B is a good antenna for my use on 2 meters FM...Several on the air in my area." (N9OPL)

"ARX2B...the best antenna." (XE2CLB)

Our Ringos are Number One.

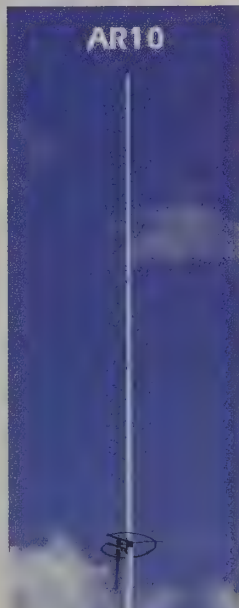
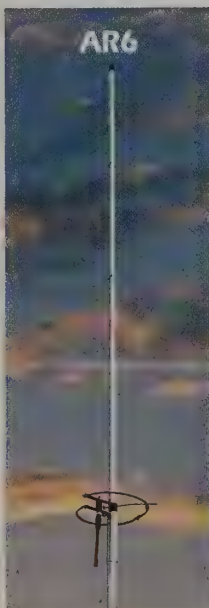
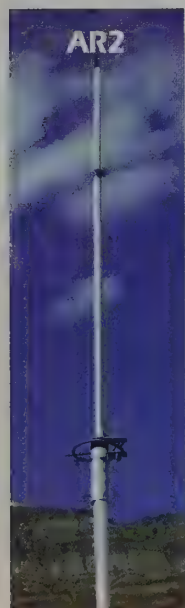
Tough performers at a good price! The Ringo family of dependable, cost-effective antennas has served more hams - from novice to veteran extra - than any other amateur antenna made. Simple, straightforward design, light weight and quick, easy installation make the durable Ringo family right for you. Ringo's top performance and low cost mean more dB per dollar - an equation anyone can appreciate.

Ringo Ranger II

Our Ringo Ranger II has more gain, less windload, and more mechanical integrity than other two meter antennas. You'll quickly appreciate the benefits of this amazing antenna! Based on the original W1BX Ringo, the Ringo Ranger II is the latest design featuring three 5/8 wave radiating elements and an adjustable 1/8 wave phasing stub. The result is a very low angle of radiation over your coverage area.

The Ringo Ranger II has built-in lightning protection, UV-stabilized insulators, heavy wall tubing, improved decoupling radials to eliminate feedline radiation, and all-weather performance.

MODEL	ARX2B	ARX220B	ARX450B
Frequency, MHz	135-160	222-225	435-450
SWR 1.2:1 Typical			
2:1 Bandwidth, MHz	>3	>5	>10
Gain, dBi	7.0	7.0	7.0
Power Rating, Watts FM	1000	500	500
Radiation Angle, Deg.	7	7	7
Horizontal Radiation			
Pattern, Degrees	360	360	360
Ring Diameter, in (cm)	5 (12.7)	5 (12.7)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	.75 (1.9)	.50 (1.2)
Height, ft, (m)	14 (4.3)	9.3 (2.8)	4.9 (1.5)
Mast Size Range, in (cm)	1.0-1.25 (2.54-3.1)	1.0-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Radial Length, in (cm)	20.5 (52.1)	13.75 (33.7)	6.75 (17.1)
Wind Load, ft ² (m ²)	0.5 (0.05)	0.3 (0.03)	0.2 (0.02)
Weight, lb (kg)	6 (2.7)	5 (2.3)	1 (.45)



Ringo

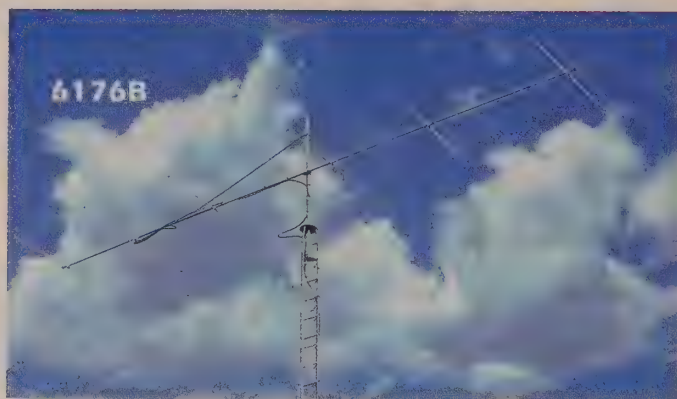
These are the original W1BX FM Ringos. If you want a combination of compact size, wide bandwidth, a low radiation angle, these economical antennas are just for you. Since radials are not needed, you can even use our Ringos indoors.

Our Ringos are 1/2 wave and include built-in lightning protection. Put up one of these easily installed antennas and start enjoying FM!

MODEL	AR2	AR6	AR10	AR450
Frequency, MHz	135-160	50-54	28-29.7	440-460
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	10	2	>1.5	20
Gain, dBi	3	3	3	3
Power Rating, Watts FM	1000	1000	1000	500
Radiation Angle, Deg.	16	16	16	16
Horizontal Radiation				
Pattern, Degrees	360	360	360	360
Ring Diameter, in (cm)	5 (12.7)	13 (33)	13 (33)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	1 (2.5)	1 (2.5)	.5 (1.3)
Height, ft, (m)	3.9 (1.2)	10.1 (3.1)	17.6 (5.36)	1.4 (.43)
Mast Size Range, in (cm)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Wind Load, ft ² (m ²)	.21 (.02)	.37 (.03)	1.68 (.16)	.1 (.01)
Weight, lb (kg)	1.5 (.68)	2.5 (1.1)	4 (1.8)	1 (.45)

CUSHCRAFT

Cushcraft Corporation, Manchester, NH



6176B

The 6176B is the favorite 6 meter contest/DX antenna for all the "Big guns". Extra wide element spacing gives maximum gain and a clean pattern. Even with a 34 foot (10.4m) boom, the 6176B weighs only 26 pounds (11.8 kg).

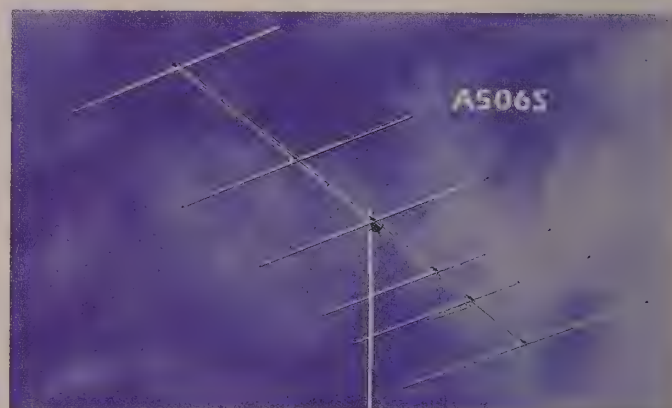


10 Meters

Looking for a lightweight, economical alternative to the 10 meter big boys? Choose the TEN3. Although it's popular with novices and technicians, this antenna is for any ham who wants more gain with a good front to back ratio on 10 meters. This antenna has an 8 foot boom (2.4m) making it easy to install on a very simple mount with only a light rotator. The matching system is our proven Reddi-Match for 50 Ohm no balun feed and SO-238 connector. Make more positive contacts with the TEN3.

6 Meter Yagis - SSB/CW/FM

Computer-aided modeling and test range techniques were used by Cushcraft engineers to further optimize the performance of our popular 6 meter Yagis. This process means more gain and cleaner patterns with excellent front-to-back ratios. S-models have very broad bandwidth so they will not detune in bad weather. They feature stainless steel hardware for long trouble-free life. Enjoy the new popularity and exciting contacts on the 6 meter band with one of the S-series Cushcraft Yagis. The A503S, A505S and A506S may be mounted vertically for FM use.



MODEL	A503S	A505S	A506S	6176B	TEN3
Frequency, MHz	50-54	50-54	50-54	50-51	28-29.7
No. Elements	3	5	6	6	3
Forward Gain, dBi	8	10.5	11.6	14.0	8
Front to Back Ratio, dB	20	24	26	30	25
SWR 1.2:1 Typical					
2:1 Bandwidth, MHz	>1	>1	>1	>1	>1.5
Power Rating, Watts PEP	1000	1000	1000	2000	2000
3dB Beamwidth, Degrees					
E Plane	76	56	48	2 x 19	64
Boom Length, ft (m)	6 (1.8)	12 (3.7)	20 (6.1)	34 (10.36)	8 (2.44)
Longest Element, in (cm)	117 (300)	123 (312)	119 (302)	117 (297.2)	18 (5.49)
Turning Radius, ft (m)	6 (1.8)	7.8 (2.37)	11.5 (3.5)	17.7 (5.39)	9.8 (3.0)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)
Wind Load, ft2 (m2)	1.80 (0.17)	2.9 (0.273)	4.46 (.41)	4.8 (.45)	2.0 (.20)
Weight, lb (kg)	7 (3.2)	11 (5.0)	18 (8.2)	26 (11.79)	9.9 (4.45)

CUSHCRAFT

BOOMER SIDEBAND/CW YAGIS



2 Meters

13B2

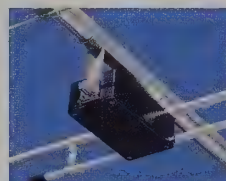


13B2 - 13 Element Wideband Boomer

The 13B2 is as versatile as the 17B2 is specialized. 13B2 will be your choice for high performance across the entire 2 meter band. New and experienced hams will enjoy 15.8 dBi gain on FM, packet, CW, or sideband across the 4 MHz operating range. The 13B2 is easily mounted vertically or horizontally for maximum performance on your favorite mode. Its optimum boom length makes it a popular antenna that fits just about anywhere. The new UltraMatch balanced feed on the 13B2 provides a 50 Ohm match via a standard SO-239 UHF female connector. Model **13B2N** has N connector.

17B2 - 17 Element CW/SSB Boomer

The serious two meter operator who is interested in EME, aurora, scatter, SSB, CW, tropo etc, will choose the 17B2. It has 17 elements on a 4.5 wavelength boom. Our computer-aided design supported by precise test range data and the latest manufacturing technology gives you a cleaner pattern and 18 dBi gain in this long boom design. Significant enhancement is provided by the new UltraMatch balanced feed system with N-connector.

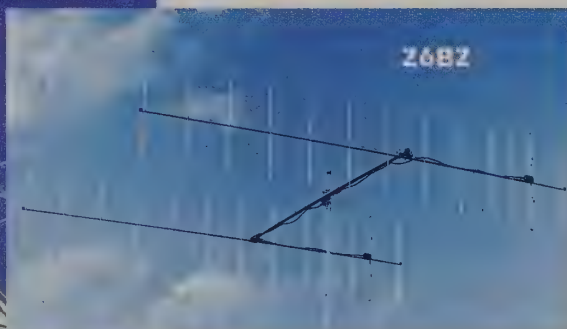


The new Cushcraft UltraMatch is a modified T-match system that provides a balanced current distribution on your Boomer. It uses UltraLink teflon® dielectric cable allowing for low loss high power applications. UltraMatch is completely enclosed for weather proofing. UltraMatch features an N-connector on the 17B2 and UHF SO239 on the 13B2. When all weather performance is important, you will choose the new UltraMatched Boomers everytime.

17B2



26B2



26B2 - 26 Element Wideband Boomer

This antenna offers the highest gain of any 2 meter FM antenna in the world. The 26B2 includes two complete 13B2 antennas, stacking boom and phasing harnesses.

124WB - 4 Element Wideband Boomer

This is the right choice for packet systems and other applications requiring a dedicated directional antenna.



A14810S & A1483S 2M Yagis

These antennas are the newest computer optimized models of our 2 meter Yagis. We have improved both the pattern and gain to give you better FM coverage.

The A1483S is the low priced quality leader for Packet, FM or even portable use. It is easily rear mounted.

A14810S is one of our best value designs with excellent gain and front-to-back ratio. Use it for long range FM or full band 2 meter operation.



MODEL	13B2	17B2	124WB	26B2	A1483S	A14810S
Frequency, MHz	144-148	144-145	144-148	144-148	144-148	144-148
No. Elements	13	17	4	26	3	10
Forward Gain, dBi	15.8	18.0	10.2	18.8	7.8	13.2
Front to Back Ratio, dB	26	26	19	26		
SWR 1.2:1 Typical						
2:1 Bandwidth, MHz	>4	>2	4	>4	>5	≥4
Power Rating, Watts PEP	2000	2000	2000	2000	1000	1000
3 dB Beamwidth, Degrees						
E Plane	2 x 18	2 x 14.5	60	2x18	66	40
H Plane	2 x 19	2 x 15	88	2x9.5	108	46
Side Lobe Atten., dB, E Plane	>60	>60	40	>60		
Boom Length, ft (m)	15 (4.57)	31 (9.45)	4 (1.22)	15 (4.57)	2.8 (.85)	12 (3.6)
Electrical Wavelength	2.2	4.5	.5	2.2		
Longest Element, in (cm)	39.75 (101)	40.75 (103.5)	40.75 (104)	39.75 (101)	41 (104.1)	40.3 (102.4)
Turning Radius, ft (m)	8.9 (2.7)	17.25 (5.26)	4 (1.22)	10.4 (3.18)	2.8 (.8)	6 (1.8)
Mast Size Range, in (cm)	1.5-2	1.5-2	1.25-2	1.5-2	1.25-2	1.25-2
	(3.8-5.1)	(3.8-5.1)	(3.2-5.1)	(3.8-5.1)	(3.2-5.1)	(3.2-5.1)
Wind Load, ft ² (m ²)	1.8 (.17)	3.9 (.36)	.34 (.034)	4.84 (.45)	.27 (.02)	1.21 (.11)
Weight, lb (kg)	6.7 (.31)	15.75 (7.14)	3 (1.36)	21.5 (9.75)	1.5 (.7)	6 (2.7)

CUSHCRAFT

Cushcraft Corporation, Manchester, NH

A14820T 2 Meter Hi-Lo Cross Yagi

Here's the antenna that solves multi-mode problems! Ten vertically polarized and ten horizontally polarized elements provide 11.1 dBi gain covering 144-148 MHz. The horizontal elements handle your CW and SSB needs, while the vertical elements cover FM. Hardware is stainless steel. Separate coax feeds allow polarization changes.

A14820T has a boom length of 11 ft. (3.4m), longest element length of 40.6 in. (103cm), wind area of 1.21 ft² (.11m²), and a mast size of 1.25-2 in. (3.2-5.1 cm).



A14820T



225WB



224WB

224WB/225WB 220 MHz Widebands

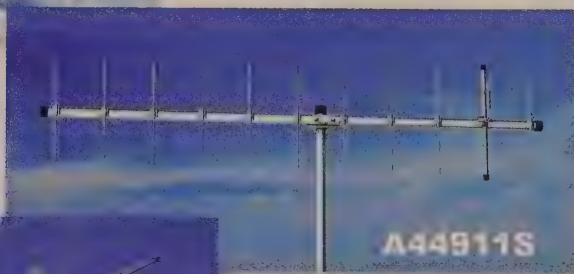
These 222 MHz beams are perfect for Packet, FM repeaters, or sideband/CW. Both antennas can be mounted for vertical or horizontal polarization.



A4496S

A4496S/A44911S

Use one of these 440 MHz beams for your FM/Packet needs. Both work great for vertical or horizontal polarization.



A44911S



719B

719B FM, CW and SSB 15.5 dBi

Looking for an antenna to enhance performance on all modes of the 70 CM band? The 13.5 foot long 719B is the right choice. Mount it vertical for FM or horizontal for CW and Sideband. The 719B joins the 2 meter 13B2 as a classic for improved performance.

MODEL	224WB	225WB	A14820T
Frequency, MHz	222-225	222-225	144-148
No. Elements	4	15	10/10
Forward Gain, dBi	10.2	15.5	13
Front to Back Ratio, dB	24	24	24
SWR 1.2:1 Typical			
2:1 Bandwidth, MHz	>5	>5	>4
Power Rating, Watts PEP	2000	2000	1000
3dB Beamwidth, Degrees			
E Plane	60	2x17	45
H Plane	88	2x19	50
Side Lobe Attenuation, dB E Plane	40	60	40
Boom Length, ft (m)	3 (.91)	10 (3.05)	11(3.4)
Electrical Wavelength	0.5	2.2	1.6
Longest Element, in (cm)	26.7 (68)	26.3 (67)	40.6 (103)
Turning Radius, ft (m)	3 (.91)	5.8 (1.78)	7.5 (2.3)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)
Wind Load, ft ² (m ²)	.23 (.021)	.95 (.09)	0.39(0.11)
Weight, lb (kg)	1.7 (.77)	5.25 (2.4)	7 (3.15)

MODEL	719B	729B	A4496S	A44911S
Frequency, MHz	430-450	430-440	440-450	440-450
No. Elements	19	29	6	11
Forward Gain, dBi	15.5	17.8	10.5	13.2
Front to Back Ratio, dB	25	25	18	20
SWR 1.2:1 Typical				
2:1 Bandwidth MHz	20	>10	>10	>10
Power Rating, Watts PEP	2000	2000	350	350
3 dB Beamwidth, Degrees				
E Plane	24	20	60	48
H Plane	19	22		
Side Lobe Atten., dB, E Plane	60	60		
Boom Length, ft (m)	13.5 (4.1)	22.17 (6.75)	2.9 (0.89)	4.2 (1.35)
Electrical Wavelength	6	9.8		
Longest Element, in (cm)	13.75 (34.9)	13.75 (34.9)	13 (33)	13 (33)
Turning Radius, ft (m)	7.25 (2.2)	12.5 (3.8)	2.9 (.89)	2.8 (.85)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)	1.25-2.0 (3.2-5.1)	1.25-1.5 (3.2-3.8)
Wind Load, ft ² (m ²)	1.2 (.11)	2.2 (.21)	0.30 (0.03)	0.39 (0.04)
Weight, lb (kg)	5.6 (2.55)	8.6 (3.9)	3 (1.4)	4 (1.8)

CUSHCRAFT

DIAMOND ANTENNAS

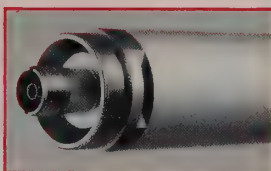
The Standard By Which All Others Are Judged.

Acclaimed as the technological leader in single & multiband antennas

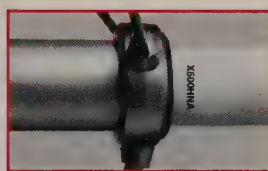
- Wide-band Performance • Factory Adjusted—No Tuning Required • Highest Gain
- UPS Shippable • High Wind Rating • Fiberglass Radome • DC Grounded • Stainless Hardware

X500HA (UHF-Conn.) X500HNA (Type-N Conn.)

**Ruggedized
Base/Repeater
Antenna**



COAX CONNECTION
AT BASE END



HEAVY DUTY BASE/
RADIAL ASSEMBLY



STRONG JOINT
COUPLINGS

X50NA

The X50NA is an excellent choice where ruggedness is required in a medium-gain, dual-band, base/repeater application.

Features

- Wide frequency bandwidth
- Heavy duty fiberglass radome
- Stainless steel mounting hardware and radials
- Type-N Cable connection
- Compact size for easy mounting/installation

Specifications:

Freq.: 2m: 144-148MHz
70cm: 440-450MHz
Gain: 2m: 4.5dB; 70cm: 7.2 dB
Power: 200 watts
Wind Rating: 135 MPH (no ice)
Height: 5.6 feet

X500HNA

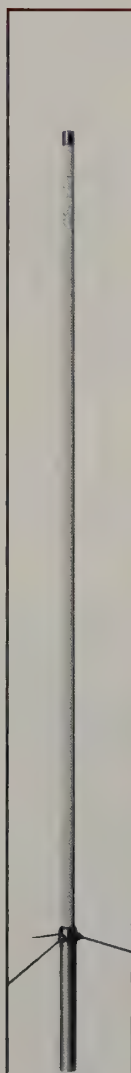
Diamond Antenna's best base station repeater antenna. Designed for strength and performance, the X500HNA is pretuned to achieve maximum gain in both the 2m and 70cm amateur bands.

Features

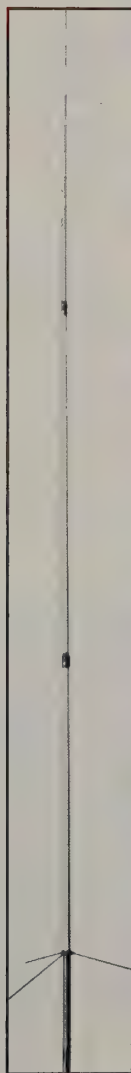
- Heavy duty fiberglass radome
- Overlapping outer shells for added strength
- Stainless steel mounting hardware and radials
- Strong-waterproof joint couplings
- Type-N Cable connection
- Wide band performance

Specifications:

Freq.: 2m: 144-148MHz
70cm: 440-450MHz
Gain: 2m: 8.3dB; 70cm: 11.7 dB
Power: 200 watts
Wind Rating: 90 MPH (no ice)
Height: 17.8 feet



X50NA



X500HNA

DIAMOND Mono-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
CP22E ¹	144	6.5	200	UHF	9.0	90
DPGH62 ^{1,6}	50	6.0	200	UHF	21.0	78
F22A	144	6.7	200	UHF	10.5	112
F23A	144	7.8	200	UHF	15.0	90
F718A ²	440	11.5	250	N	15.0	90

DIAMOND Dual-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
X50A	144/440	4.5/7.2	200	UHF	5.6	135
X50NA	144/440	4.5/7.2	200	N	5.6	135
X200A	144/440	6.0/8.0	200	UHF	8.3	112
X510NA ³	144/440	8.3/11.7	200	N	17.2	90
X510MA	144/440	8.3/11.7	200	UHF	17.2	90
X500HNA	144/440	8.3/11.7	200	N	17.8	90+
X700HNA	144/440	9.3/13.0	200	N	24.0	90
X2200A	144/222	6.0/7.8	150	UHF	11.5	112
U200	440/1240	8.3/11.7	100	N	5.9	135

DIAMOND Tri-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
U5000A	144/440/1240	4.5/8.3/11.7	100	N	5.9	135
V2000A ^{4,6}	52/144/440	2.1/6.2/8.4	150	UHF	8.3	110
X3200A ⁵	146/222/440	6.0/7.8/8.0	100/200	UHF	10.5	112
X6000A	144/440/1240	6.5/9.0/10.0	100/60	N	10.5	112

¹ Heavy duty aluminum construction.

² F-718A: 440-450MHz, F718L: 420-430MHz.

³ X510NU: 144-147/430-440MHz.

⁴ 1/4" rated in dBi.

⁵ 2m: 146-148; 100 watts

⁶ 52-54MHz. only; DPGH62 adjustable from 50-54MHz.

BAND: 144=144-148MHz, 222=222-225MHz, 420=420-430MHz, 430=430-440MHz, 440=440-450MHz, 1240=1240-1300MHz.

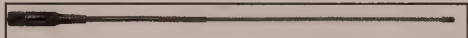
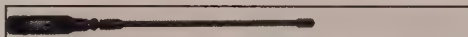


DIAMOND Antenna Accessories

High Efficiency HT & Scanner Antennas HF Multiband Vertical Antenna Duplexers & Triplexers Dummy Loads & Coaxial Switches

RH Series

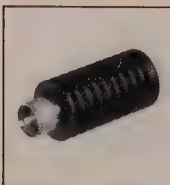
High quality, high gain HT antennas for mono, dual, and tri-band handheld radios. Available in both BNC and SMA connections. Increase the performance on your handheld or wideband scanner with a Diamond RH Series antenna.

RH3		SRH805		SMA
RH77CA				
RH951S				
RH707				
RH205				
SRH519 & SRH815				SMA

MODEL	DESCRIPTION	RELATIVE GAIN*
D130J	Wideband disccone 25-1300 MHz. 200 W transmit 50-1300 MHz. No cable.	N/A
RH3	2m/70m dual band "Black Bullet" HT antenna. 1.75" BNC. 120 to 900 receive	-2 dB
RH77CA	High gain 2m/70cm dual band HT antenna. Receive range to 900 MHz. BNC.	+6 dB
RH205	2m HT antenna, telescopic, 5/8λ, fully extended, 47.5"; 1/4λ, retracted, 9"	+9 dB
RH519	2m/70cm slim dual-band HT antenna. Flexible. 8" BNC, 10 watts.	+3 dB
RH707	2m/70cm dual-band -tiltable whip - HT antenna. 8 1/4" BNC.	+3 dB
RH951S	High gain 2m/70cm/23cm slim tri-band HT antenna. Flexible. BNC (Wide band receive)	+6 dB
SRH519	2m/70cm dual-band HT antenna. Flexible. 8" SMA, 10 watts.	+3 dB
SRH805	2m/70cm/23cm tri-band HT antenna. 1.75" SMA, 10 watts.	-2 dB
SRH815	2m/70cm/23cm tri-band HT antenna. Flexible. 6" SMA, 10 watts.	+3dB

*Rated against typical stock HT antennas.

DL30A/DL30N



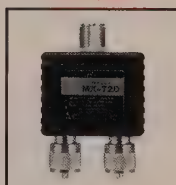
CX210A/CX210N



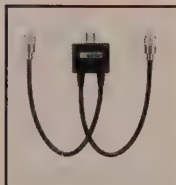
CX310A



MX-72D



MX-72H/N



MODEL	DESCRIPTION
CX210A	Heavy duty wideband coax switch, DC-1000 MHz. 1.5 kW, 50-239
CX210N	Heavy duty wideband coax switch, DC-1500 MHz. 1.5 kW, Type N
CX310A	Heavy duty wideband coax switch, 3 position, DC-800MHz, 50-239
DL30A	Dummy load, DC-500 MHz. 15w average/100w peak. PL-259
DL30N	Dummy load, DC-500MHz. 15w average/100w peak. Type N

CP6A HF MULTIBAND VERTICAL

The New CP6A multi-band trap-vertical antenna for HF bands, covering the 75*, 40, 20, 15, 10 and 6m amateur bands. Made from heavy-duty aluminum, the CP6A assembles easily, yields excellent performance and reliability from a compact base station antenna. Its compact size allows for many mounting options. Minimum 15 feet diameter required for mounting radials. No additional ground radials required. Mounting hardware included.

*75m requires a tuner.

Specifications

Frequency:	75*/40/20/15/10/6m
Power:	200w PEP
Impedance:	50Ω
VSWR:	1.5:1 nominal
Element:	1/4 wave trap vertical
Radials:	Trap design, six
Grounding:	Direct grounding.
	Antenna element & radials connected to mounting pipe.
Max. Wind Rating:	80mph (no ice)
Max Diameter	
Accatance:	1.2-2.4"
Overall Length:	15.10' (4.6m)
Weight:	9.9lbs. (4.9kg)
Connector:	50-239 female UHF
Bandwidth:	75m 20kHz
(for nominal	40m 40kHz
1.5:1 VSWR	20m 100kHz
without	15m 200kHz
antenna	10m 500kHz
tuner)	6m 3.5MHz

NEW

6m
10m
15m
20m
40m
75m*

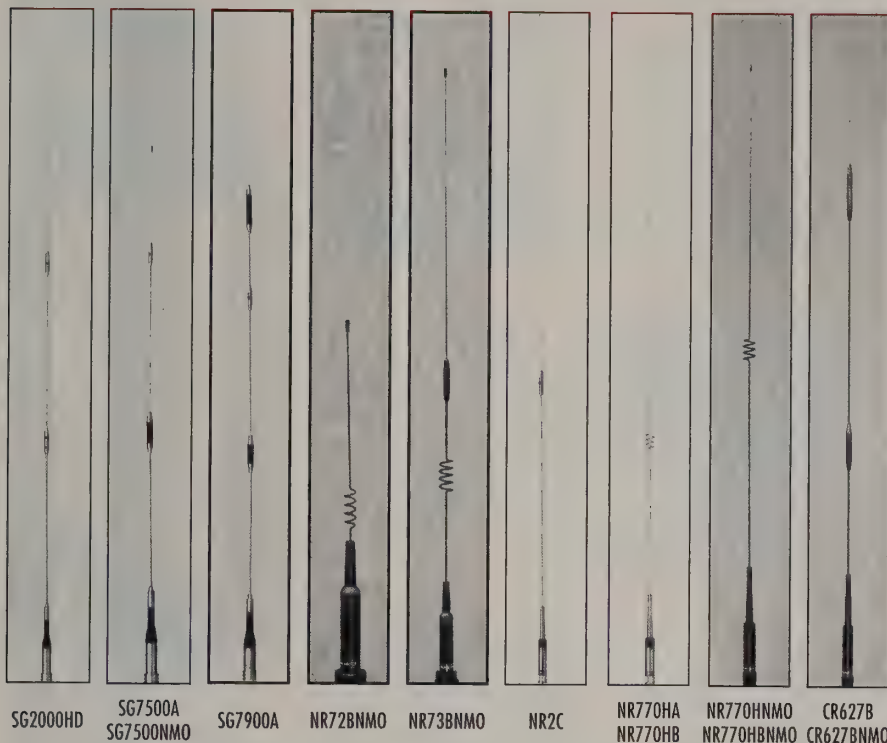
Duplexers/Triplexers

MODEL	MX72D	MX72H	MX72N	MX2000	MX2000D	
FREQUENCY BAND (MHz)	LPF 1.6-30	140-150	HPF 400-460	LPF 1.6-60	BPF 110-170	HPF 300-950
PWR CW (ICAS) WATTS P.E.P.	400 1000	150 400	100 250	800	800	500
THRU LOSS /dB	0.15	0.15	0.25	0.15	0.2	0.25
ISOL		60dB			60dB	
VSWR		1.2:1			1.2:1	
CONNECTOR COMPLEMENT	M MIX 144 430 M M	M MIX 144 430 M M	M MIX 144 430 M N	M MIX 50 144 430 M M M	M MIX 50 144 430 M M M	
CONNECTOR	Direct	12" Cable w/Connectors		12" Cable w/Connectors		Direct

DIAMOND'S STATE-OF-THE-ART

VHF/UHF And HF/VHF Mobile Antennas—
Maximum Performance Without Compromise

You've seen the rest...now own the BEST!



SG2000HD SG7500A SG7500NMO SG7900A NR72BNMO NR73BNMO NR2C NR770HA NR770HB NR770HBNMO CR627B

SPECIAL FEATURES:

- Factory pre-tuned/no adjustment
- Highest Performance antennas
- NMO and UHF (PO) base styles
- 24 Kt gold plated connector pin
- No grounding required unless noted
- Fold-over feature on most models

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
NR72BNMO* ⁶	2m/70cm	2.15	100	NMO	13.8	1/4λ, 1/2λ
NR73BNMO	2m/70cm	2.15/5.3	100	NMO	33.5	1/2λ, 1-5/8λ
NR770HA ⁷	2m/70cm	3.0/5.5	200	UHF	40.2	1/2λ, 2-5/8λ
NR770HBNMO ⁸	2m/70cm	3.0/5.5	200	NMO	38.2	1/2λ, 2-5/8λ
NR770RA	2m/70cm	3.0/5.5	200	UHF	38.6	1/2λ, 2-5/8λ
SG7000A* ⁶	2m/70cm	2.15/3.8	100	UHF	18.5	1/4λ, 6/8λ
SG7500A	2m/70cm	3.5/6.0	150	UHF	40.6	1/2λ, 2-5/8λ
SG7500NMO	2m/70cm	3.5/6.0	150	NMO	41.0	1/2λ, 2-5/8λ
SG7900A*	2m/70cm	5.0/7.6	150	UHF	62.2	7/8λ, 3-5/8λ

* Not recommended for Magnet Mount

⁶ Grounding required.

⁷ NR770HB same specifications but in black finish.

⁸ NR770HBNMO same specifications but in black finish.

⁹ 52-54MHz only

HV7A Mobile Antenna System

For New HF/VHF transceivers **NEW!**
(Such as: IC706 series and FT100)

Optional Loading Coils

HVC7	40m
HVC14	20m
HVC18	17m
HVC21	15m

Recommended Antenna Mounts: K400C or K600M

MX62M Duplexer

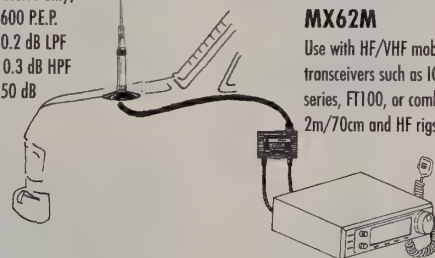
Specifications:
HF/6m & 2m/70cm bands
1.6-56 MHz LPF
76-470 MHz HPF
(76-120 receive only)
Watts: 600 P.E.P.
Loss: 0.2 dB LPF
0.3 dB HPF
Isol.: 50 dB

The NEW HV7A has 5 band capability: 70cm, 2m, 6m, and 2 HF bands through use of loading coils. Foldover feature allows for easy access into low over-head buildings. Ideal for users of IC706 series and FT100 radios.

Bands Supplied: 10m/6m/2m/70cm
Opt. Loading Coils: 40m/20m/17m/15m
Power, P.E.P.: HF 120w/VHF 200w
Mount Connection: UHF
Length: 54"
SWR: 1.5:1 nominal

MX62M

Use with HF/VHF mobile transceivers such as IC706 series, FT100, or combine 2m/70cm and HF rigs.



FOLD-OVER

Patented One-Touch Fold-over Feature
(Not available on NR72BNMO, NR73BNMO, & NR770SA.)

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
NR2C	2m	4.1	150	UHF	55.5	1/2λ+1/4λ
SG2000HD*	2m	5.2	250	UHF	62.6	1/2λ+3/8λ
SG6000NMO* ^{6,9}	6m	2.1	150	NMO	39	1/4λ
NR124	23cm	8.4	100	N	25	4-5/8λ
CR224A* ⁶	2m/1-1/4m	5.0/6.0	150	UHF	68.5	7/8λ, 2-5/8λ
CR320A* ⁶	2m/1-1/4m 70cm	2.15/3.8/ 5.5	200 100/200	UHF	37.4	1/4λ, 1/2λ 2-5/8λ
CR627B* ^{6,9}	6m/2m/	2.1/4.5/	120	UHF	60	1/4λ, 1/2+1/4λ
CR627BNMO* ^{6,9}	70cm	7.2	120	NMO	60	2-5/8λ
NR2000NA	2m/70cm 23cm	3.15/6.3/ 9.7	100	N	39	1/2λ, 2-5/8λ 5-5/8λ

1/4λ rated in dBi.

DIAMOND'S Premium Antenna Mounts & Cable Assemblies

Designed for today's high performance antennas

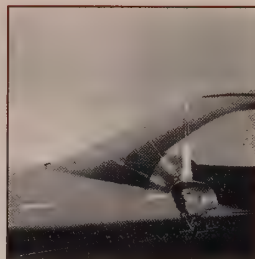
K9000

Motorized Mount

Raise and lower your antenna with a touch of a button. Vertical adjustment 0-9°. Accepts "ground independent" antennas up to 45". Recommended antennas: SG7500NMO, NR73BNMO, SG7500A, NR2C and NR770 series.

K9000TM Trunk/Hatchback Mount
K9000LRM Luggage Rack Mount

* Use C-Series cable assemblies.



K412

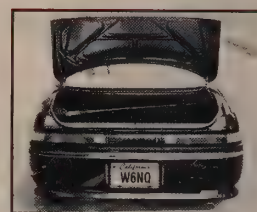
Light Duty Hatchback/ Door Trunk Lid Mount

Two-axis adjustable mount for light weight antennas. 1.5 inch mounting width. Ideal for tight mounting options. Recommended for antennas under 45".

K412C SO-239 base, 6.5' coax & PL-259
K412CNMO NMO base, 6.5' coax & PL-259

* Use C110 for front radio installations.

NEW!



K601

Hide-Away Mount

Folds antenna safely into trunk. Fully adjustable, fits most vehicles. Recommended antennas: NR2C, NR73BNMO, NR770HNMO, NR770HA, NR70HBNMO, NR770HB, NR770RA, SG7200NMO, SG7500A and SG7500NMO.

K601M SO-239 base, 6.5' coax & PL-259
K601NMO NMO Base, 6.5' coax & PL-259

* Use C110 for front radio installations.

K600

Variable Angle Trunk Mount

Deluxe aerodynamic trunk mount. Vertical adjustment 0-9°. 4" wide mounting base with 4 set screws for maximum strength. Recommended for high gain VHF/UHF antennas.

K600M SO-239 base, 16.5' coax & PL-259



K550

Luggage Rack Mount

Adjustable luggage rack mount for new mini vans.

K550KM SO-239 base, 16.5' coax & PL-259
K550 Mount Only

K400

Hatchback/Door Trunk Lid Mount

Diamond's deluxe heavy duty mount. Two-axis adjustable. 4" wide mounting base with 4 set screws for maximum strength. Recommended for high gain VHF/UHF antennas.

K400C* SO-239 base, 6.5' coax & PL-259
K400CNMO* NMO base, 6.5' coax & PL-259
K400N Type-N base, 13.5' coax & Type N

* Use C110 for front radio installations.

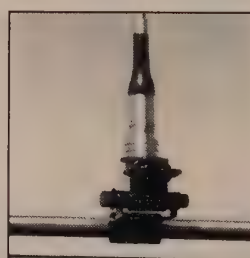


K540

Mirror/Luggage Rack Mount

Adjustable Mirror/Luggage rack mount accepts 1/2" to 7/8" tubing. Fits most mirrors and utility racks.

K540KM SO-239 base, 16.5' coax & PL-259
K540 Mount Only



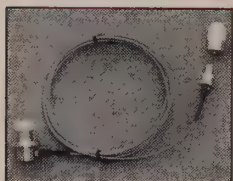
NEW!

K702M

Magnet Mount Base

Deluxe low profile magnet mount with high holding power. Aerodynamic styling, large 6 3/8" diameter, 3/4" height. For VHF/UHF antennas up to 50" height. Includes thin mylar protective sheet to enhance grip and protect vehicle paint. Cable: 13' RG58A/U & PL-259.

C-SERIES CABLE ASSEMBLIES



C101

SO-239 base, 6.5' RG316 Teflon coax & PL-259. Ideal cable assembly for trunk mount/remote head installations.

C101NMO

Same as C101 with NMO base. For Diamond's K-Series mounts only.



C110

Extension cable for C101. 10' RG8X coax w/mini UHF connectors. Use C110 to extend cable to 16.5' for most front radio installations.

C110BNC

10' assembly similar to above, uses RG316 Teflon coax terminating in BNC-male.



C211

SO-239 base, 16.5' cable assembly & PL-259. Combination of C101 & C110.

C213

Same as C101 with 13.5' cable assembly.

C213NMO

Same as C101NMO with 13.5' cable assembly.

K400-3/8 C

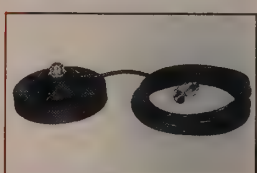
Special Trunk Mount for 3/8 x 24 Thread Antennas

Ideal mount for Outbacker Perth, OB Jr., and other medium weight antennas.

Note: Use C110, 10ft extension for front radio installation

Adjustment: 2 axis
Power: 350 watts RMS
500 w P.E.P.
Cable 6 1/2' RG316 Teflon coax w/PL-259

Spring recommended for stiff/heavy antennas



SPM35

Magnet Mount Base

Heavy duty 2.2 lb./4" magnet mount rated 25-500 MHz. Cable: 13' coax and PL-259. Recommended for antennas under 45".

SPM-NMO

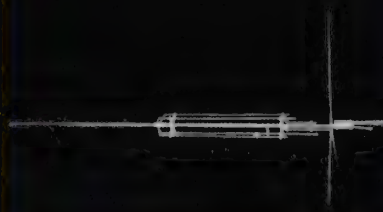
Magnet Mount Base

Similar to the SPM35, but has NMO mount.

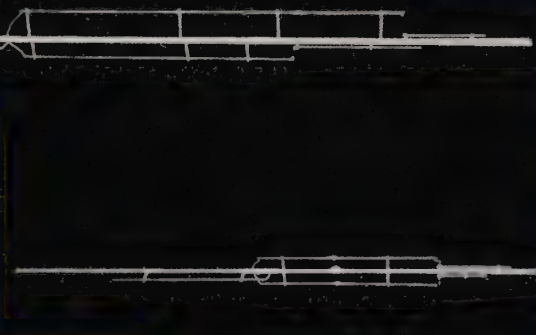
GAP: THE PERFECT ANTENNA

Latest Release: **TITAN DX**

We at GAP realize there isn't a perfect antenna. No singular antenna will scream DX on 80 and be the best for local nets on 10. If anyone tells you there is, beware! The perfect antenna does not exist, but the right one for you may. If you want something to bust the pile on the low bands, then consider the Voyager. Just starting out in ham radio and need a great general coverage antenna, the Challenger is easy to assemble and for little effort will yield superior performance, especially on DX. Maybe you knowingly or unknowingly moved into one of those "restricted areas" where the Eagle's limited visibility, but unlimited ability is desired.



Eagle DX



Challenger DX



Voyager DX

This chart helps you select the right GAP antenna. When comparing GAPs, bandwidth is not a concern. With few exceptions, a GAP yields continuous coverage under 2:1 for the ENTIRE BAND.

All antennas utilize a GAP elevated asymmetric feed. A major benefit is the virtual elimination of the earth loss, so more RF radiates into the air instead of the ground. This feed is why a GAP requires **NO RADIALS**. Just as elevating a GAP offers no significant improvement to its performance, adding radials won't either, making set up a breeze.

A GAP antenna has no traps, coils or transformers. This is important. The greatest sources of failure in multiband antennas are these devices. Perhaps you heard someone discuss a trap that had melted, arced or became full of water. Improvements to these inherent problems are the focus of the antenna manufacturer, while the basic design of the antenna remains unchanged. **GAP improved the trap by eliminating it!** Removing these devices means they don't have to be tuned and, more importantly, won't be detuned by the first ice or rain. The absence of these devices improves antenna reliability, stability and increases bandwidth.

Another major advantage to a GAP antenna is its NO tune feature. Screws are simply inserted into predrilled holes with a supplied nutdriver.

The secret is out and people in the know say:

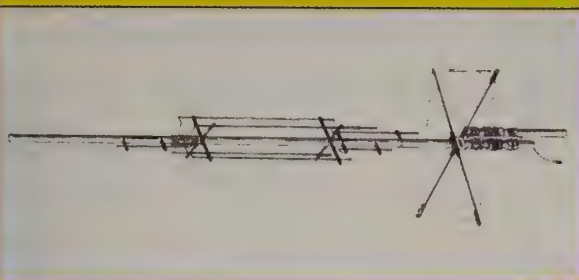
CO—"The GAP consistently outperformed base-fed antennas... and was quieter."

73—"This is a real DX antenna, much quieter than other verticals."

RF—"To say this antenna is effective would be a real understatement. Switching back and forth on 40m between another multiband HF vertical and the GAP, there was no comparison. Signals were always stronger on the GAP; sometimes by 5 units, not just DBs."

Worldradio—"These guys have solved the problem associated with verticals. That is, an awful lot of RF is wallowing around and dropping into the dirt instead of going outward bound. A half-wave vertical does need radials if it is end fed (at the bottom). But the same half-wave vertical does not (as much, hardly at all) if it is fed in the center."

IEEE—"Near field and power density analyses show another advantage of this antenna (asymmetric vertical dipole): it decreases the power density close to the ground, and so avoids power dissipation in the soil below it. The input impedance is very stable and almost independent of ground conductivity. This antenna can operate with high radiation efficiency in the MF AM standard broadcast band, without the classical buried ground plane, so as to yield easier installation and maintenance."



This all purpose antenna is designed to operate 10m-80m. WARC bands included. It sits on a 1-1/4" pipe and can be mounted close to the ground or up on a roof. Its bandwidth and no tune feature make it an ideal antenna for the limited space environment as well as a terrific addition to the antenna farm.

GAP

ANTENNA PRODUCTS, INC.
99 N. Willow Street
Fellsmere, FL 32948
tel: (561)-571-9922
web: gapantenna.com

TO ORDER, CALL AES...

1-800-558-0411

MODEL	BANDS OF OPERATION											WT	MOUNT	COUNTER-POISE
	2m	6m	10m	12m	15m	17m	20m	30m	40m	80m	160m			
Challenger DX	■	■	■	■	■	■	■	■	■	■	■	21 lbs	Drop In Ground Mount	3 Wires @ 25"
Eagle DX			■	■	■	■	■	■	■	■	■	19 lbs	1-1/4" pipe	80" Rigid
Titan DX			■	■	■	■	■	■	■	■	■	25 lbs	1-1/4" pipe	80" Rigid
Voyager DX							■		■	■	■	39 lbs	Hinged Base	3 Wires @ 57"

See Price List for GAP Quick-Tilt Mounts, Counterpoise and Guy Kit Prices



G3-144 Omni Directional Fixed Station

The G3-144 is the newest addition to the Hustler Base Station line. Designed with the cost conscious amateur in mind, this small, inexpensive antenna delivers more gain than other antennas in its price range. Ideal for home or emergency command post.

ELECTRICAL

- Gain: 3 dB
- Omni directional radiation pattern
- Frequency Range: 144-148 MHz
- 50 ohm feed impedance
- VSWR: less than 1.5:1
- 50 ohm feed impedance
- VSWR: less than 1.5:1
- Maximum Power: 200 Watts
- Bandwidth: 6 MHz
- Impedance (nom): 50 ohms

MECHANICAL

- Termination: UHF female
- Length: 7.5'
- Weight: 2 lbs
- Wind Survival: 100 mph
- Wind Area: .5 ft
- Mounting: 1" - 1 3/4"

G3-144

New!



**Closeup of
G3-144**

G6-270R Dual Band Base Antenna For 2 Meter and 440 MHz

ELECTRICAL

- Maximum power: 100 Watts
- Gain: 6 dB VHF & UHF
- Bandwidth: 1.5:1 SWR 2 MHz - 2 Meters 10 MHz - 440 MHz
- Feed: Shunt, DC ground
- Connector: N female

MECHANICAL

- Length: 7 ft. 6 in.
- Weight: 5.3 lbs.
- Wind Survival: 100 mph
- Mounting: Vertical support 1.25" - 1.5" mast



G6-270R

G6-440 Omni Directional Fixed Station

ELECTRICAL

- Maximum power: 250 watts
- Gain: 6 dB
- Bandwidth: 8 MHz. Under 1.5:1 SWR
- Impedance: 50 ohm nominal
- Lightning protection: direct ground
- Termination: Type N female

MECHANICAL

- Length: 7 ft. 3 in.
- Weight: 5 lbs.
- Wind survival: 125 mph
- Mounting: Vertical support up to 2.0" O.D.

VHF and UHF Fixed Station Vertical Antennas

G7-144 Two Meter Antenna Omni Directional Fixed Station

ELECTRICAL

- Maximum power: 600 watts.
- Gain: 7 dB over 1/2 wave dipole.
- Bandwidth: 4 MHz. Under 2:1 VSWR
- Impedance: 50 ohm feed.
- Tuning range: 144-148 MHz.
- Feed: Shunt, DC ground.
- Radiator: Triple 5/8 wave elements in series, separated by 2 phasing coils to produce maximum gain.



G7-144

MECHANICAL

- Length: 15 ft. 4 in.
- Weight: 10 lbs.
- Radials: (4) 20.25" x 0.375" O.D.
- Connector: N type.
- Wind load: 26 lbs. @ 100 mph.
- Mounting: Vertical support up to 1.75" O.D.
- High strength fiberglass and aluminum.

G7-220 Omni Directional Fixed Station

ELECTRICAL

- Maximum power: 600 watts
- SWR resonance 1.2:1 at the antenna
- Impedance: 50 ohms

MECHANICAL

- Length: 10 ft. 2 in.
- Weight: 7 lbs.
- Radials: (4) 14.75" x 0.1875" O.D.
- Connector: Type N
- Wind load: 26 lbs. @ 100 mph
- Mounting: Vertical support up to 1.75" O.D.

G6-144B Two Meter Antenna Omni Directional Fixed Station

(similar to picture above)

ELECTRICAL

- Gain: 6 dB over 1/2 wave dipole.
- Omni directional radiation pattern
- Maximum radiation at an extremely low angle
- 50 ohm feed impedance
- Field adjustable: 140-150 MHz

MECHANICAL

- Length: 9 ft. 9 in., from 1.125" telescopic to 0.375".
- Weight: 6.8 lbs.
- Wind load: 26 lbs. @ 100 mph.
- Mounting: Vertical support up to 1.75" O.D.

New-Tronics Antenna Corporation

One New-Tronics Place
Mineral Wells, Texas 76067-9563

Phone: **940.325.1386**
Toll Free: **877.994.9499**
Fax: **940.328.1409**

*Reliability
&
Performance...
Beyond your Expectations!*

See the full line of Hustler Antennas at our new Web Site!

www.new-tronics.com



VHF and UHF Mobile Antennas

MX Series NMO Magnetic Mount Antenna

- 3.4 dB gain, 144 - 149 MHz
- Power rating: 200 watts
- NMO style magnetic mount.



- NEW!**
- MX-220**
220 MHz., black & chrome
- MX-440**
440 MHz 5 dB gain
- MX-2**
2 meter, black and chrome
- MX-2B**
2 meter, all black

Unity Gain

THF

VHF/UHF Trunk Lip Mount Antenna



UHT-1

VHF/UHF Roof/Deck Mount Antenna

Collinear

CGT-220

5.2 dB Gain $5/8 \lambda$ over $1/4 \lambda$ for collinear trunk lip mount antenna.

- 1.1:1 SWR (typical) at resonance
- 4 MHz. Bandwidth under 1.5:1 SWR
- Power Rating: 200 watts FM
- Height: 4 ft. 9 in. including mount
- Spin knob to remove antenna
- 17 ft. of low loss coax with connector

CG-220 (not pictured)

This model has identical characteristics at the CGT-220 but with a $3/8 \times 24$ threaded base.

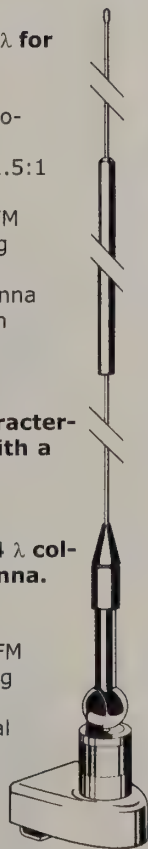
CGT-144 (as pictured)

5.2 dB Gain, $5/8 \lambda$ over $1/4 \lambda$ col-linear trunk lip mount antenna.

- 6 MHz bandwidth
- 1.5:1 SWR
- Power rating: 200 watts FM
- Length: 7 ft. 1 in. including mount
- 180° swivel ball for vertical positioning
- 17 ft. coax with connector

CG-144 (not pictured)

Same as CGT-144 but has $3/8 \times 24$ threaded base.



Dual Band 2 meter/ 70cm Mobile Antennas

Hustler's new Dual Band antennas are designed to perform even in the toughest environments. Base coils are ultrasonically welded to ensure mechanical integrity and durability. Coils and contacts are silver plated for excellent electrical connections.

- MX-270** (far right)
- 2.4 dB/ 4dB gain
 - Power Rating: 100 watts
 - NMO style magnetic mount
- MX-270B** (near right)

Black version of MX-270, and uses high quality black power paint.



Check out our prices!

LMC-270* (far left)

- 2.4 dB/ 4dB gain
- Power Rating: 100 watts

LMB-270* (above)

Black version of above, and uses high quality black power paint.

BBG-144 (far right) & **BBGT-144**

- 3.4dB gain
- Power rating- 200 watts
- NMO style coil
- includes swivel ball and spring

BBGT-440-5 & **BBG-440-5**

- 440 MHz versions of above
- 5dB Gain

BBGT models include trunk mount and 17' RG-58 coax →



LMB, LMC, LMG and BBG

Antennas are coil & whip only and require an NMO mount. All 144 models are 2m.

LMG-144

- 3.4 dB gain
- Power rating: 200 watts
- NMO style coil
- Contact: silver plated push pin

LMG-440-5

- 440 MHz version of above
- 5db gain
- Power rating: 200 watts
- NMO style coil
- Contact- silver plated push pin

LMB-144

- 3.4dB gain
- Power rating: 200 watts
- NMO style coil
- All Black

LMB-440-5

- 440 MHz version of above
- 5db gain
- Power rating: 200 watts
- NMO style coil
- All Black

NOTE: All NMO style antennas available in frequency ranges 150-174 MHz and 450-470 MHz

LMB-144
LMB 440-5



UGM

VHF/UHF Magnetic Mount Antenna

Extend the range of handheld or portable radios. Trimmable 17-7 PH stainless steel radiator is cut to $1/4$ wavelength for low SWR and unity gain from 140 to 500 MHz. Trim chart included. Highly efficient mylar protected magnetic mount attaches conveniently to magnetic compatible surfaces. No drilling! Supplied ready for operation with 10 ft. of mini-coax with BNC connector.



SF-2

Low Cost 3.4 dB Gain, 2 meter $5/8 \lambda$ for $3/8 \times 24$ thread mounts.

- 1.2:1 SWR at resonance
- Power rating: 100 watts FM
- Tapered stainless radiator
- Length: 4 ft.

SF-220

Low cost 3.4 dB gain 220 MHz. $5/8 \lambda$ for $3/8 \times 24$ thread mounts.

SF-2



MKR-2 Radial Kit

Contains three de-coupling radials and mount to convert series fed mobile VHF antennas to fixed operation. Performance is comparable to many regular base antennas. Suitable for permanent installations of portable use. Heavy duty zinc plated mast bracket and hardware. Accepts antennas with standard $3/8 \times 24$ threaded base.

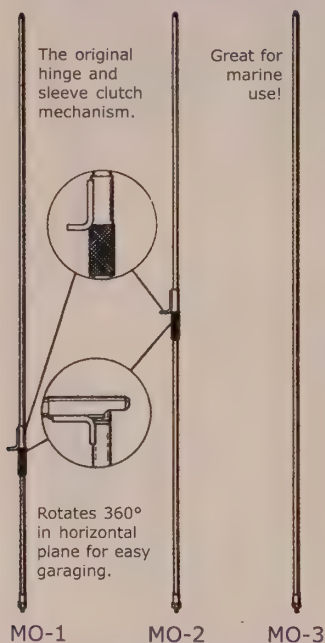


MKR-2

New-Tronics Antenna Corporation
One New-Tronics Place
Mineral Wells, Texas 76067-9563

Phone: **940.325.1386**
Toll Free: **877.994.9499**
Fax: **940.328.1409**

Amateur HF Mobile 10, 12, 15, 17, 20, 30, 40, 75 and 80 Meters



If you are serious about HF mobile operation the **Hustler** HF Mobile System is the obvious choice. **Hustler** manufactures and sells more HF mobile antennas world wide than anyone. No other manufacturer offers the convenience, the flexibility or the pure performance that **Hustler** does. Our HF Mobile System offers a wide variety of components which enable you to customize your installation to fit your present and future needs. A choice of four different support masts provides an installation solution for every vehicle. A selection of seventeen interchangeable resonators in high and moderate power levels and varying bandwidths are available. A full complement of accessories such as springs, a multiband adapter and a quick disconnect device complete the system. Experience the satisfaction that comes with owning the best in the world — the **Hustler** HF Mobile System.

Mobile HF Antennas

Hustler Masts

MO-1

Mobile mast 54" high, for deck or fender mounting. Folds over at 15" above base. Made of highest quality heat treated aluminum and chrome plated brass.

MO-2

Mobile mast, 54" high, for bumper mounting. Folds over at 27" above base.

MO-3

Mobile mast, 54" high, solid aluminum with white vinyl coating. Does not fold over.

MO-4

HF Mobile mast only 22" long. Suitable for trunk or deck mounting. Included three new tip rods. 3/8" X 24 threads on both ends.

Hustler Resonators

Standard Resonators

Power rating — 400 watts SSB

Part	Description	Approximate Bandwidth (KHz.) 2:1 SWR or Better
RM-10	10 Meter	150-250
RM-11	11 Meter	150-250
RM-12	12 Meter	90-120
RM-15	15 Meter	100-150
RM-17	17 Meter	100-150
RM-20	20 Meter	80-100
RM-30	30 Meter	50-60
RM-40	40 Meter	40-50
RM-75	75 Meter	25-30
RM-80	80 Meter	25-30

Super Resonators

Power rating — full legal limit. Super Resonators also offer wider bandwidth, especially on 40, 75 and 80 meters.

Part	Description	Approximate Bandwidth (KHz.) 2:1 SWR or Better
RM-10-S	10 Meter	250-400
RM-11-S	11 Meter	250-400
RM-15-S	15 Meter	150-200
RM-20-S	20 Meter	100-150
RM-40-S	40 Meter	50-80
RM-75-S	75 Meter	50-60
RM-80-S	80 Meter	50-60

Professional Series Heavy Chrome Model C-32

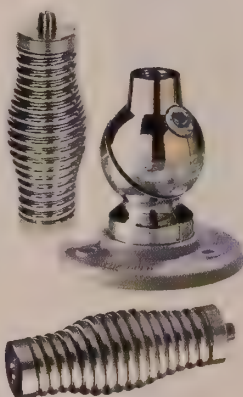
Hustler professional ball mount. Furnished complete with rubber pad, steel backup plate, all mounting hardware, and a hex wrench.

C-29

Stainless steel, corrosion resistant and electroplated spring complete with 3/8" x 24 coupling stud.

C-30

Chrome plated steel spring complete with 3/8" x 24 coupling stud.



Resonator Spring RSS-2

Finest quality stainless steel spring for use between resonator and Hustler antenna mast. This 3/4" x 3" x 1/2" spring absorbs shock when the antenna strikes overhanging obstructions. Supplied ready for easy installation with 3/8" x 24 threads, female on one end, and male on the other.

MBM "Super" Magnet

- 95 lbs. Pull strength
- Powerful 5 inch diameter magnet
- 16 feet RG 58 coax with PL-259 connector.
- 3/8" x 24 female threads
- Recommended for antennas up to 48" in length.

Stainless Steel Mounts

- Exceptional performance and quality
- 180° adjustable reinforced stainless steel ball.
- Professional quality Lexan base for greatest mechanical stability
- Exclusive "C" backup plate allows external installation
- Supplied with all mounting hardware and cork pad
- Applicable with all Hustler and other 3/8" x 24 thread.

SSM-1 Professional Ball Mount and Spring.

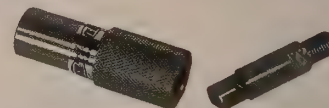
SSM-2 Ball mount.

SSM-3 Stainless Steel Spring with Coupling Stud.

Quick Disconnect QD-2

100% Stainless Steel. Remove antenna from mount in seconds with push and twist release. Every part including the compression spring is manufactured from the best available 100%

stainless steel. Special design of enclosed compression and lock assembly assures freedom against ice and dirt jam up. Accommodates small, medium and large mobile antennas. Equipped with 3/8" x 24 threads, female on one end and male on the other.



MO-4



RM-10

RM-75

Fixed Station Multi-Band HF Vertical Antennas

Hustler, Inc. has been producing HF vertical antennas of unusual electrical performance and mechanical integrity since 1959. Many of those original verticals are still in service after over 30 years of reliable operations.

Our exclusive trap design offers the lowest loss possible. A special extrusion process allows us to produce trap covers to an otherwise unattainable close tolerance, assuring accurate and permanent resonance. Our highly accurate traps provide top signal reports and consistent contacts.

Accurate tuning is made possible by the wide range of tuning flexibility designed into our verticals. Not only can you use the normal adjustable tubing to change resonance, but the traps themselves can be field tuned for an additional 2 MHz. shift. This flexibility will enable you to achieve a good S.W.R. even if your installation is not ideal.

Broadbanded – low VSWR at band edges
Power capability – full legal limit on SSB or CW
Solid one inch fiberglass trap forms for optimum electrical and mechanical stability
Heavy wall, high strength aluminum tubing, heavy duty aluminum mounting bracket and low loss, high strength insulators.
Stainless steel clamps and hardware.
Easy assembly and tuning.
Single line feed with any length of 50 ohm coax.
Use as ground mount with or without radials, or elevated mount with radials.

4-BTV

Bands 10-15-20-30-40 & 75 or 80 meters
Length/weight 24 ft. / 16.5 lbs.
Mounting Vertical support up to 1.75" O.D.
Wind Load 29 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR
at resonance 1.15 to 1 or better
Bandwidth VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. On 75 or 80 meters)

5-BTV

Bands 10-15-20-40 & 75 or 80 meters
Length/weight 25 ft. 1 in. / 16.5 lbs.
Mounting Vertical support up to 1.75" O.D.
Wind Load 29 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR
at resonance 1.15 to 1 or better
Bandwidth VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. On 75 or 80 meters)

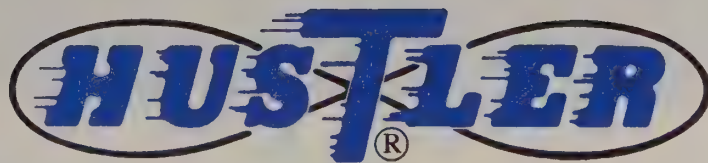
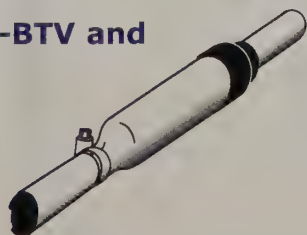
6-BTV

Bands 10-15-20-40 meters
Length/weight 21 ft. 5 in. / 15 lbs.
Mounting Vertical support up to 1.75" O.D.
Wind Load 28 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR
at resonance 1.15 to 1 or better
Bandwidth VSWR 1.6:1 at band edges

30 Meter Add-on Kit for 4-BTV and 5-BTV

Model 30-MTK

Full 30 meter band coverage
Will not affect normal operation
Easy installation
All hardware included



CB Antennas

RQM

An attractive antenna with a contemporary design. Features a black tapered whip and spring to match the black plastic housing. Magnetic mount, 42 inches tall, includes 16' of coax.



RQM*

Our newest magnetic mount antenna, the 1C-100 offers reliable tuning, solid performance and quality construction. A one piece plastic housing covers the coil and powerful magnetic mount. 41 inches tall, includes 15' of coax. Available in black or white.

1C-11

Our new trunk lip design in an economy package. The plastic housing is available in black or white. Stainless steel whip. 42" overall length, includes 16' of coax.



1C-100*



1C-11*

SCB and SCB-S Antennas

Designed to meet the most demanding applications, the SCB sets new standards in electrical performance as well as durability. The large diameter, high efficiency coil is computer designed to the optimum length to diameter ratio. This results in a coil capable of easily covering 120 channels at 1000 watt power levels. The lower half of the SCB is constructed from 3/8 inch diameter, solid stainless steel rod which is virtually indestructible. A stainless steel spring is mounted on the top of the coil where shock absorption is most effective. The SCB is 46 inches tall. The SCB-S is only 35 inches tall. Both are available in red, white, black and blue (shown). It mates with 3/8" X 24 threaded mounts.



*Reliability & Performance...
Beyond your Expectations!*

NEW-TRONICS ANTENNA CORPORATION

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**COME SEE THE FULL LINE OF HUSTLER ANTENNAS AT OUR NEW
WEB SITE!**

Dual Band Series

Larsen dual band antennas provide excellent performance for simultaneous use of VHF and UHF amateur frequencies. Each Larsen dual band antenna is factory preset to guarantee optimum performance with no tuning required.

NMO-2/70-SH\$36.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: NMOUHFBASEB w/spring
Height: 17"
Whip: WNMO2/70SH

Lower profile amateur 2m/70cm dual band antenna with spring for NMO mounts.



NMO-2/70B (black)\$60.99

Freq: 144-148/440-450 MHz
Gain: 2.4/4dB
Power: 100 Watts
Type: VHF: 5/8 Wave
UHF: Collinear
Base: NMO2/70BCO
Height: 33.5"
Whip: W2/70B

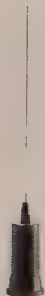
Amateur 2m/70cm dual band antenna for NMO mounts. Available in chrome (below).



NMO-2/70C (chrome)\$56.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: 5/8 Wave
UHF: Collinear
Base: NMO2/70BCO
Height: 36.75"
Whip: W2/70

Amateur 2m/70cm dual band antenna for NMO mounts. Available in black (above).



MM-2/70\$46.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: 3' Round Mag Mount
Height: 17"
Whip: WNMOQ2/70B

Complete 2m/70cm magnetic mount antenna with 12' of RG58A/U coax.



NMOQ-2/70-B (black)\$34.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: NMOUHFBASEB
Height: 18"
Whip: WNMOQ2/70B



Kulglass Series

Larsen's Kulglass™ (KG) series uses a patented low impedance design and advanced materials to produce the world's best on-glass antenna. The KG uses advanced resin polymer plastic to completely enclose the circuit board or loading coil for mechanical durability and weather resistance. 3M's best adhesive tape, plus Larsen's unique bonding enhancer ensure the best possible grip to the glass.

KG-2/70-CX-PL\$106.99

Freq: 144-148/442-448 MHz
Gain: 2.4/4.5dB*
Power: 50 Watts
Type: VHF: 1/2 Wave
UHF: Collinear
Base: KG2/700/S
Height: 32.5"

*Ground plane required for gain

Glass mount dual band antenna for 2m/70cm amateur radio frequencies.



KG-144-UD-PL\$76.99

Freq: 144-160 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG1440/S
Conn: PL-259
Height: 48"
Whip: WKG144

Complete KG glass mount antenna.



KG-220-UD-PL\$76.99

Freq: 220-225 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG2200/S
Conn: PL-259
Height: 26.5"
Whip: WKG220

Complete KG glass mount antenna.



KG-440-UD-PL\$70.99

Freq: 440-460 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG4400/S
Conn: PL-259
Height: 15"
Whip: WKG440

Complete KG UHF glass mount antenna with coax and connector.



Kulduckie Portable Series

Superior transmit range and tough mechanical durability are the hallmark of Larsen portables. All center cores are made of brass or copper plated steel to maximize RF emission. Fully soldered connections and silver-plated components improve electrical efficiency. Double spring BNC's also reduce wear on the mount. Other mounting styles available.

KD4-146\$19.99

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/4 Wave Helical
Conn: BNC
Height: 8"



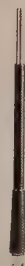
KD4-146-HQ (2m)\$24.99

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/4 Wave Helical
Conn: BNC
Height: 8"



KD-14-2M-HW\$37.99

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/2 Wave Telescoping
Conn: BNC
Height: 8.5 to 42"
Whip: WKD142MHW



KD4-2/70\$31.99

Freq: 144-148/442-448 MHz
Gain: Unity
Power: 25 Watts
Type: VHF: Loaded 1/4 Wave
UHF: 1/4 Wave
Conn: BNC
Height: 8"

Impedance matching transformer provides high Q and deeper resonance.



Hear The Difference

NMO Mobile Antennas

Larsen's own version of the standard 3/4" Motorola TAD/TAE type mount uses advanced design, materials and construction to provide a premium mount. For demanding outdoor applications, the chemical resistant NMO series is housed in a resin polymer plastic shell which is completely molded around the nickel plated brass whip stud to eliminate moisture damage. Our superseal gasket also greatly reduces water intrusion under the base.

NMO-27C (chrome) \$33.99

Freq: 27-31 MHz
Gain: Unity
Power: 200 Watts
Type: Loaded 1/4 Wave
Base: NMO27BCO
Height: 53"
Whip: W490

NMOQ-SPEC \$11.99

Freq: 136-512 MHz
Gain: Unity
Power: 200 Watts
Type: 1/4 Wave
Height: 21"

NMO-150C (chrome) \$30.99

NMO-150B (black) \$33.99

Freq: 144-174 MHz
Gain: 3dBd
Power: 200 Watts
Type: 5/8 Wave
Base: NMO150BCO
Height: 51.75"
Whip: W490

NMO-220C (chrome) \$30.99

NMO-220B (black) \$36.99

Freq: 220-225 MHz
Gain: Unity
Power: 200 Watts
Type: 5/8 Wave
Base: NMO220BCO
Height: 34.5"
Whip: W400

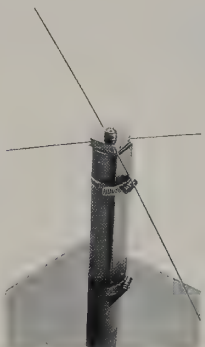
NMO-440C (chrome) \$29.99

NMO-440B (black) \$35.99

Freq: 440-460 MHz
Gain: 4.5dBd
Power: 200 Watts
Type: 5/8 over 1/2 Wave
Base: NMOUHFBASEB
Height: 33"
Whip: W154

Base Station Antennas

Larsen manufactures a variety of small base station for directional and omni-directional applications. Each base station antenna is designed with premium materials to withstand the most demanding weather conditions. All base station antennas come with mounting hardware to attach to a pole up to 2" in diameter.



BSA-K \$50.99

Freq: 144-512 MHz
VSWR: 1.5:1 or less
Power: 200 Watts
Conn: UHF Female
Whip: 51-3/4"

Complete base station kit for designing a base station unit from 144-512 MHz. Comes with mounting hardware (antenna is extra).

Mounts

Larsen has a full line of permanent and temporary mounts to solve nearly every installation problem. Each mount is manufactured of the highest quality materials, including premium coax.

NMO-K \$15.99

Motorola style
roof mount

Size: 3/4"
Coax: 17' RG-58A/U
Conn: PL-259



NMO-MM \$31.99

Motorola style
magnetic mount

Size: 3-1/2" x 3"
Rectangle
Coax: 12' RG-58A/U
Conn: 58FCP
Pull Strength: 90 lbs.



NMO-TLP \$29.99

Motorola style trunk
lip bracket, black

Size: 1-3/4" x
1-3/4"
Coax: 17' RG-
58A/U
Conn: PL-259



PO-K \$27.99

S0-239 female type roof
mount

Size: 3/4" hole
Coax: 17' RG-58A/U
Conn: PL-259



PO-MM \$34.99

S0-239 female type magnetic mount

Size: 3-1/2" x 3"
Rectangle
Coax: 17' RG-58A/U
Conn: 58FCP
Pull Strength: 90 lbs.



TMB-34 \$5.99

TMB-34B (black) \$7.99

Chrome trunk mounting
bracket for NMO antenna.

Size: 1-5/8" x 1-5/8"
Mount: NMO



Parts and Accessories

W-490 \$9.99

Chrome .100 tapered replacement whip
for 144 MHz. (49")

W-490B \$12.99

Black .100 tapered replacement whip
for 144 MHz. (49")

W-2/70B \$26.99

Black .100 dia. replacement whip
for NMO 2/70B (approx. 31")

RADIALL/LARSEN
antenna technologies

Radiall/Larsen Antenna Technologies

3611 NE 112th Avenue

Vancouver, WA 98682

360 944-7551, Fax: 360 944-7556

Email: info@radialllarsen.com

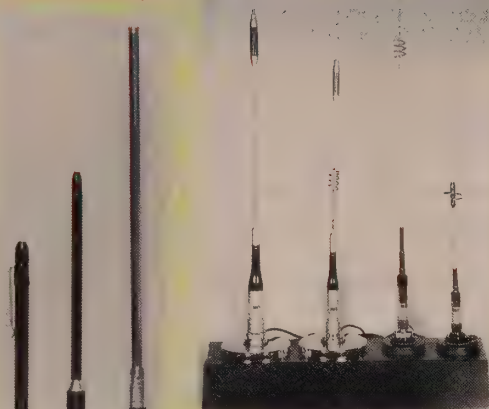
Web: www.radialllarsen.com

HT RANGE EXTENDERS

MFJ-1714 Long Ranger™ 2M Halfwave For really long range, this MFJ end-fed halfwave is hard to beat. It out performs a 5/8 wave on a handheld because the 5/8 wave needs a ground plane where the MFJ halfwave does not. It is shorter, lighter, has more gain & places less stress on your antenna connector than a 5/8 wave. When collapsed, it performs like a rubber duck. It is 40" extended and 10 1/2" collapsed.... **\$16.99**

MFJ-1712 Dual Bander™ 2M & 440MHz New dualband handheld or separate units? One antenna fits all. It's 1/4 wave for 2m and 5/8 wave with gain for 440MHz. 7 1/2" collapsed, 19" extended... **\$14.99**

MFJ-1710 Pocket Linear™ 3/8 Wave, 2M Carry in your pocket like a ballpoint pen. When using your rubber duck, on the fringe and noisy, put on the Pocket Linear, extend to 24 1/2" and carry on your QSO. Pocket clip. 5 1/2" collapsed..... **\$9.99**



RUFFRIDER™ MOBILE MOUNTS

Super heavy duty antenna mounts with SO-239 base. Use adapter for NMO. Includes 10 ft. of low loss coaxial cable with PL-259 connector. Bases are heavy duty and super rigid to reduce SWR flutter due to wind vibration. Double Allen set screws fasten the radiator and a specially treated center pin provides excellent electrical connection. Allen wrenches, protection caps and locking screws included.

MFJ-340 Mirror/Luggage Pipe Clamp Mount Mounts on support rod of mirror, luggage rack or spare tire carrier of a truck, van, RV or SUV. Mounts on any horizontal, vertical or angled rod/pipe up to 5/8" in diameter. Secures VHF, UHF and medium size HF antennas even at highway speeds. Convenient thumb and finger turn knob makes fold-over operation quick and easy. Locks in 12 different positions **\$34.99**

MFJ-345 Trunk/Hatchback Lip Mount Mounts to any lip on your vehicle. Extra-wide 4" lip and large reinforcing tabs on each side safely distributes the load. Secures large VHF, UHF and medium size HF antennas even at highway speeds. Scratch-proof rubber guard protects vehicle's finish **\$34.99**

RUFFRIDER™ MOBILE ANTENNAS (mounts not included)

This series features quality construction using precision machined components. Designed to battle the elements, rugged rides and highway abuse.

Dual band 144/440MHz mobiles have stacked stainless steel elements with high-Q phasing coils resulting in outstanding gain. Phased radiators flatten radiation patterns and concentrate transmit power at the horizon for maximum distance.

All models are factory tuned for SWR less than 1.5:1 and have 50Ω impedance. Each comes w/SO-239 base, but also includes a **FREE** NMO adapter.

MFJ-1402 Junior 16 1/2" ant. fits in any garage on any vehicle. 3dB gain on 2M, 5.5dB gain on 440MHz. Handles 100W. No fold-over **\$34.99**

MFJ-1412 High Power Only 40" long but handles a full 200W. Great for high power mobile & amp. 3dB on 2M, 5.5dB on 440MHz..... **\$49.99**

MFJ-1422 High Gain 41 1/2" long giving you extra gain with little increase in height. Handles 150W. 3.2dB on 2M, 5.7dB on 440MHz **\$49.99**

MFJ-1432 Highest Gain Tall 62 1/2" brute gives you a whopping 5dB gain on 2M, 7.6dB gain on 440MHz. Handles 150W **\$69.99**

M ANTENNAS - POSITIONERS - ACCESSORIES

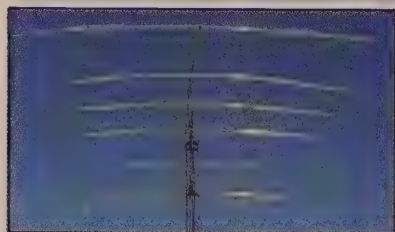
AMATEUR

COMMERCIAL

GOVERNMENT

SCIENTIFIC

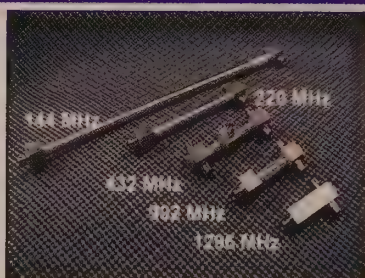
We have always offered performance and we have held that standard as our line grew. We continue to expand our line with innovative, longer lasting, trouble free antennas. In some models we bridge from amateur to commercial notably with our 23CM22EZ and EGGBEATER antennas. You have to look long and hard to find this much high performance variety!



* NEW KT36XA TRIBANDER *



2M HO LOOP



OR2800PDC

See the Price Guide for more products or check out the M² Website at www.m2inc.com

M2 ANTENNA SYSTEMS, INC. 7560 N. Del Mar. Fresno, CA 93711

(559) 432-8873 Fax (559) 432-3059 Website: www.m2inc.com Email: wyatt@m2inc.com



146/437-10 Pictured is Gerald Schmitt, KK5YY, working VE6EGN on the AO27 amateur radio satellite using a Yaesu VX-1R with 500mW output and connected to an Arrow 146/437-10 antenna. KK5YY worked from many Alaskan grid squares during his 1998 trip, including a contact from the Arctic Circle.

The Arrow is designed specifically to allow portable satellite operation using just an HT. This means engineering it to provide maximum gain and efficiency in the smallest practical size and weight.

The boom construction is 3/4" square aluminum stock, 37 1/2" long with a foam grip on the back end for comfort. The three VHF and seven UHF Gamma matched elements with separate BNC connectors are aluminum arrow shafts which are strong and lightweight, and plastic tipped for safety **\$73.99**

146/437-10BP Split boom model..... **\$79.99**

COMET™

HF/VHF/UHF MOBILE ANTENNA

For radios that operate HF/6M/2M/70cm

CA-UHV Designed for 6 and 2M and 70cm basic operation without tuning. Additional coverage for 40, 15 and 10 meters may be added by installing the supplied coils for those bands. Coils for 20 and 17 meters are optional. Choose either one, two, or three coils and add one to the top, and one or two to the side, in any combination. Automatic bandswitching. Each HF element tunes independently without effecting VHF/UHF.

Only 7 ft. 2 inches tall with the 40M coil attached to the top. A unique fold-over hinge pivots approximately 5 inches from the bottom for garaging, entering parking structures, etc.

Installs on any standard SO-239 (PO) type mount; no special brackets are needed. Several duplexers/ triplexers are available for all of the multiband radios, including the FT-100, IC-706MKIIG, FT-847, etc. - see the index under duplexers for selection.

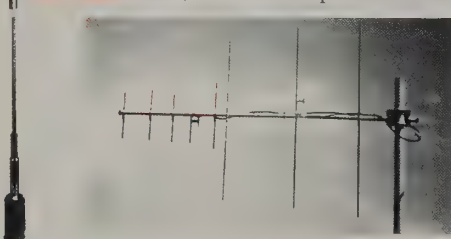
CA-UHV HF/6M/2M/70cm antenna . **\$139.99**

L-14 20M coil **29.99**

L-18 17M coil **29.99**

CF-530 1.3-90/125-470MHz duplexer.... **69.99**

CF-706A 1.3-57/75-550MHz duplexer... **69.99**



CYA-240 Dual Band 2M/70cm Antenna Single boom design with five UHF elements in front of three VHF elements, only 5' 3" long. Separating yagis from each other produces the best radiation pattern. Gain: 7.4 dBd on 144-148MHz; 9.5dBd on 440-450MHz. F/B ratio is 18dB. The included power divider allows single feedline operation. High-grade aluminum and stainless steel hardware. Elements are secured with wing nuts making portable use easy. Horizontal or vertical mounting. Power rating: 300W SSB, 150W FM/CW. Accepts masts 1 1/2" to 2 1/2", 4 lbs. 7oz..... **\$99.99**



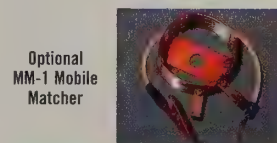
CA-52HB4 Wide Band 6 Meter Beam

• HB9CV, 4-element • 50MHz band frequency • 50Ω impedance • <1.5:1 (50-54MHz) VSWR • 10.4 dBi gain • Half power angle <54° • Over 19dB F/B ratio • 400W maximum power, SSB • Boom length, 10.5 ft. • 7.3 ft. turning radius • SO-239 connector • 1.0 to 2.5 in. mast diameter • 4 lbs, 14 oz..... **\$119.99**

GH-50 6M Vertical Antenna Omni-directional • 50MHz band frequency • One-piece white fiberglass with tuning stub on top • 7 feet, 10 inches long • 50Ω impedance • 1.5:1 or less VSWR • 1MHz, tunable • 2.5dBi gain over 1/4-wave • Maximum power: 120W, SSB/60W, FM • SO-239 connector • 2 lbs, 10 oz **\$99.99**



BG-1500 Bugcatcher HF Mobile Antenna Multiband Coverage on all Ham bands 3.5 to 30MHz. Optional 6m adapter. • Easy band switching to pre-tuned frequencies on any band - just move the tap • Adjustable capacity hat for fine tuning • 1500W power rating, 3/4 inch corona ball • 24" stainless steel base, total length 90 inches • Quick disconnect . **Closeout \$169.99**



ADAPT-6M shown with Hi-Q resonator

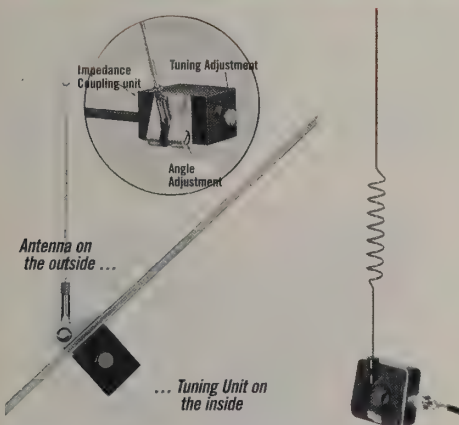
ADAPT-6M 6M Adapter for 1500.... **C/O \$14.99**

MM-1 Mobile Antenna Matcher Installs between Bugcatcher and mount. Moving the tap provides adjust. of base impedance to better match the transmission line. Improves performance.. **C/O \$24.99**

CC-4 Extra Coil Clips pack of 4.. **Closeout \$7.99**

BM-EXT Mast Extension 24" ... **Closeout \$24.99**

ANTENNA SPECIALISTS



"ON-GLASS™" MOBILE ANTENNAS

No holes to cut! The small Tuning Unit attaches to the glass inside the vehicle, and couples capacitively through-the-glass to the Radiating Element mounted on the outside. Installs with easily removable adhesive. Includes adhesive, 15 ft. of coaxial cable with PL-259 connector • 100W • 144-174MHz (APR-151.3), 138-150MHz (AP-143) • 6MHz, tunable bandwidth • Less than 1.5:1 VSWR • 50Ω nominal impedance • Electrical 1/2-wave radiator • Shunt fed, DC ground coupling unit • 33" (APR-151.3) 23" (AP-143) stainless steel, black DURA-COAT™ finish whip • 15' RG-58/U cable with PL-259

APR-151.3 (left) 2m, On-glass, 33" high ... **\$69.99**

AP-143 (right) 2m cell "look-alike," 23" ... **\$69.99**

BENCHER, INC.



TRIBAND YAGI

Put a design breakthrough on your tower.

SKYHAWK 3X10 3 band, 10 element, 20/15/10M, 100% rust free **Drop Ship \$999.99**

VERTICALS & the amazingly small HF5B Butterfly Beam

Simply the best, yet competitively priced.



HF-2V 80/40 vertical, 32' **\$249.99**

HF-6VX 6-band vertical, 26' **\$329.99**

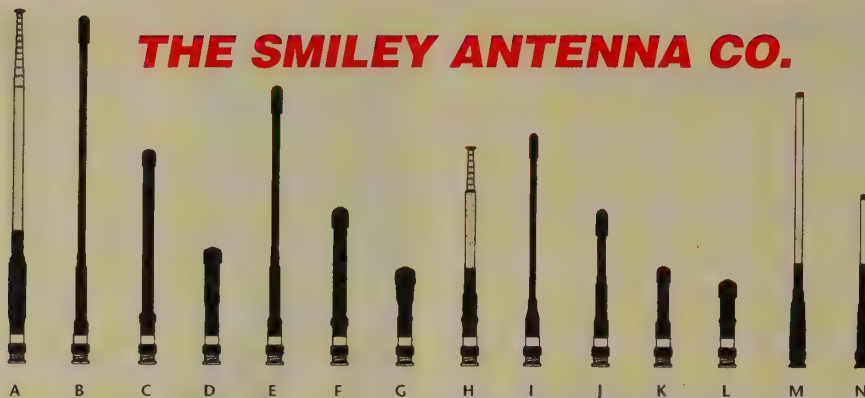
HF-9VX 9-band vertical, 26' **\$389.99**

HF-5B Butterfly Beam, 20-10M .. **\$399.99**

www.bencher.com



THE SMILEY ANTENNA CO.



HAND TUNED ANTENNAS FOR HANDHELD RADIOS

Each Smiley antenna is individually tuned to resonance at band center under normal operating conditions (no ground plane, no radials). They're manufactured from the finest heat-treated copper plated spring steel coils. Cold rubber compound is used for coil insulation with a neoprene heat-shrink coating applied for strength and endurance. All have BNC connectors.

TS Thin Stick 1/4-wave telescoping dual band antenna for 144 and 220MHz bands **\$16.99**

SS-II Super Stick II (A) 2M, 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain fully extended. Usable fully collapsed, or one section 1/4 wave. 54" extended, 10" collapsed **\$19.99**

SS-II/COMBO Super Stick II Combo (D) Same as above, but includes a 2m stubby duck **\$26.99**

5/8 SLD-2 5/8 Slim Duck (B) 2m, 5/8-wave, 7db gain, flexible base loaded ant. 12" long **\$17.99**

5/8 SLD-2 COMBO 5/8 Slim Duck Combo (D) As above, but includes a 2m stubby duck.. **\$24.99**

RD-2 Regular Duck (C) For 2m. Tuned ducks show a 3db gain over other rubber ducks because they are impedance matched for HTs **\$14.99**

RDS-2 Stubby Duck (D) Tuned, for 2m.. **\$14.99**

SS-III Super Stick III 220MHz 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain extended; usable collapsed, or a one-section 1/4-wave. 36" extended, 8 3/4" collapsed **\$19.99**

SS-III/COMBO Super Stick III/Combo (G) As above, but incl. a 220MHz stubby duck **\$26.99**

5/8 SLD-220 5/8 Slim Duck (E) 220MHz, 7db gain, flexible base loaded 9" antenna **\$17.99**

5/8 SLD-220 COMBO 5/8 Slim Duck Combo (G) Same as above, but includes a 220MHz stubby duck antenna **\$24.99**

RD-220 Regular Duck (F) 220MHz, tune **\$14.99**

RDS-220 Stubby Duck (G) As above **\$14.99**

SS-IV Super Stick IV (H) 440MHz 5/8-wave, flexible telescoping ant. 6-9db gain extended; usable collapsed. 18" extended, 5 3/4" collapsed **\$19.99**

SS-IV/COMBO Super Stick IV Combo (K) Same as above, plus has 440MHz stubby duck ... **\$26.99**

SL-440 Slimline (I) 440MHz, 1/2-wv. flex. **\$12.99**

5/8 SLD-440 5/8 Slim Duck (J) 440MHz, 7db gain, flexible base loaded 5" antenna **\$17.99**

5/8 SLD-440 COMBO 5/8 Slim Duck Combo (K) As above, plus has a 440MHz stubby ... **\$24.99**

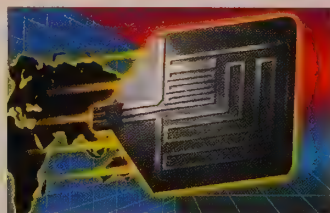
RDS-440 Stubby (K) 440MHz, tuned..... **\$14.99**

RDMD-440 Mini Duck (L) Like above.... **\$14.99**

FLX 1/2 WAV-2M Flex-Coil (M) 2M, 1/2-wave, 7-9db gain, flexible base, 35" fully extended **\$25.99**

270A (N) Telescoping 2m/440 gain antenna. 1/4-wave (2m) 5/8-wave (440 MHz). The 270A is also available with SMA **\$19.99**

TAQ 1/4-wave whip antenna, specify for 2M, 220 or 440MHz each **\$10.99**



Freedom Antenna A concealed, disguised antenna system that mounts on-glass inside the vehicle. It uses an advanced, copper-etched serpentine array contour design. At .013" thick, its ultra-thin interior-mount design virtually disappears into your windshield. At only 3 3/8" square, its "stealth-like" finish blends totally into the glare band. Simply locate the recommended area on your windshield interior. Then, apply like a decal, route the cable and connect it to your radio. No holes to drill, no magnet scratches, no suction cup smudges and no clips. It's limited to 75W of power.

HVA-146 140-155 MHz **\$69.99**

HVA-460 435-480 MHz **\$69.99**

PREMIER communications

HT ANTENNA

AL-800 Telescoping Antenna This highly popular antenna is Premier's top of the line. Great for satellite operation, or whenever you end up on the fringes of your favorite repeater. Telescopes to 34", collapses to 10". Has 3.2dBi gain on VHF and 5.5 dBi gain on UHF.. **\$29.99**

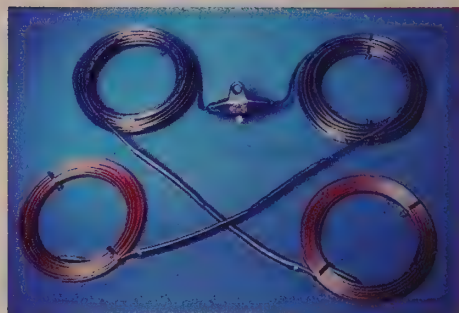
Many more antenna models are available! Check the price guide under PREMIER for details!

we have a

SECURE web site
at **www.aesham.com**



www.iacantennas.com



Double Bazooka Half Wave Antennas are constructed with a flat-top of 50Ω coax and a section of 300Ω transmission line at each end. The shield is split in the middle, but the center conductor and insulation are left intact. The feedline connects to the split shield which becomes the radiating element. This results in quiet, broadband operation with 98% efficiency and a 50Ω balanced feedpoint without a balun. Mount it horizontally or as an inverted V. Handles legal RF power limit. Has weatherproof center insulator, feeds directly with 50Ω coax with PL-259 connector. The 80m version will operate efficiently on 80-10m with antenna tuner.

160m Bazooka 1.8 MHz (160M), 248' **\$214.99**

80m Bazooka 3.5 MHz (75-80M), 121' **\$150.99**

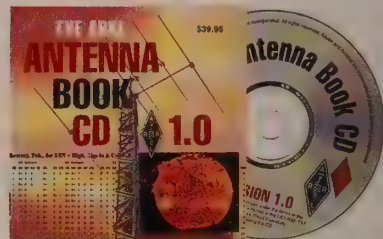
40m Bazooka 7 MHz (40M), 64 ft **\$126.99**

Half Sloper Antennas An extremely broad-banded antenna that can operate efficiently across an entire Ham band with less than a 2:1 VSWR. It's a quarter wavelength long, constructed from 50Ω coax in combination with a 300Ω transmission line end section. (looks like one-half of the Double Bazooka pictured). Mounts from a tower or vertical metal support for optimum results, and feeds directly with 50Ω coax with PL-259. Ground return is accomplished through the metal support. Handles full legal power.

160m-S 160M, 127 ft **\$140.99**

80m-S 75-80M, 67 ft., operates 80-10m with antenna tuner **\$115.99**

40m-S 40M, 33 ft. **\$105.99**



ARR 128 ARRL Antenna Book CD 1.0 Full text of the 18th edition of *The ARRL Antenna Book*, including the drawings, tables, illustrations and photographs that accompany the text. Using Adobe Acrobat Reader (included), you can view and print the text of the book, zoom in and out on the pages and copy selected parts of pages to the clipboard. Acrobat Search helps you find topics of interest. The Antenna Book companion software is also present on the CD-ROM. Over 70,000 pages of propagation tables, covering propagation from 144 locations around the world (40 in the USA alone) via principal MF/HF amateur bands. Compatible with x86-based PC (386 min.; 486, Pentium or Pentium II recommended) and Macintosh OS 7.0 or later **\$39.95**





pictured with GS-2000

DS-2000 Universal Pipe/
Tower Mount A quick and eco-
nomical mount for adding com-
pact off-air antennas to a DBS sys-
tem. With the included 2" U-bolts,

it is quickly adaptable to many different pole instal-
lations. Without the U-bolts, the mount can be used
for attic installations. The 22" pipe has an E-coat fin-
ish for maximum weather protection **\$16.99**

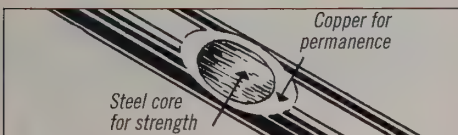
TV-2900 Weatherproof Transformer 82 channel,
matching transformer for indoor or outdoor use.
Adapts 75Ω coaxial cable with F-connector to termi-
nals of a 300Ω TV antenna, TV set or coupler.
Includes F-connector and boot..... **\$2.99**

LB-2000 Dual Feed LNBF
Dual feed LNBF for digital
satellite use in the continen-
tal United States. Feed two
receivers from a single satel-
lite dish..... **\$75.99**

RG-6 75Ω TV Coaxial Cable
with cellular poly dielectric,
#20 copperweld center con-
ductor, 100% aluminum foil
shield and 40% aluminum
braid shield provides low-
loss, good conductivity, flexibility and tensile
strength. Weather-proof F-connectors installed.

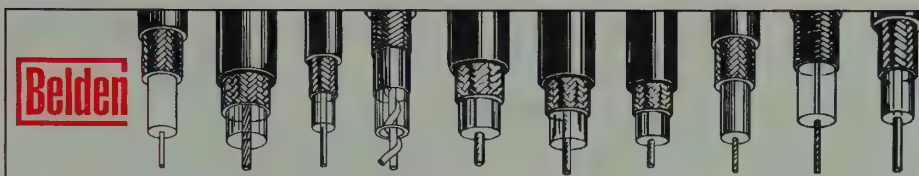
CX-0625 25 ft. length..... **\$10.99**
CX-0650 50 ft. length..... **\$15.99**
CX-0675 75 ft. length..... **\$19.99**
CX-6100 100 ft. length..... **\$24.99**

CASTLE RIDGE PRODUCTS, INC.



COPPERWELD® Antenna Wire **FORGE-WELDED**
makes the two metals inseparable! Solid bare copper-
over-steel wire – the Best for antennas. Very strong,
the steel core has very little stretch and long service
life. The copper covering provides low RF resistance
and is easy to solder. Choice of 12, 14 or 18 gauge.

AN-122 100 ft. #12 **\$24.99**
AN-123 150 ft. #12 **\$34.99**
AN-124 250 ft. #12 **\$49.99**
AN-126 500 ft. #12 **\$89.99**
AN-128 1000 ft. #12..... **\$149.99**
AN-142 100 ft. #14 **\$19.99**
AN-143 150 ft. #14 **\$24.99**
AN-144 250 ft. #14 **\$34.99**
AN-146 500 ft. #14 **\$59.99**
AN-148 1000 ft. #14..... **\$104.99**
AN-181 250 ft. #18 **\$14.99**
AN-182 500 ft. #18 **\$24.99**



COAXIAL CABLE

See Belden in the Price Guide

Model	Type	Dia. (in.)	Center conductor	Insulation type	Shield coverage	Jacket type	Imp. (Ω)	Vel. factor	Loss/100' 100 MHz
8216	RG-174 Sub- miniature	.11	28 AWG bare copper coat steel	Solid polyethylene	90% tinned copper braid	Black PVC	50Ω	66%	8.4
8219	RG-58A/U	.193	20 AWG solid bare copper	Foam polyethylene	96% tinned copper braid	Black PVC	53.5Ω	73%	4.5 dB
8240	RG-58/U	.195	20 AWG solid bare copper	Solid polyethylene	95% tinned copper braid	Black PVC	51.5Ω	66%	3.8 dB
8259	RG-58A/U	.193	20 AWG stranded tinned copper	Solid polyethylene	95% tinned copper braid	Black PVC	50Ω	66%	5.4 dB
8262	RG-58C/U non- contaminating	.195	20 AWG stranded tinned copper	Solid polyethylene	95% tinned copper	Black, non-contaminating PVC	50Ω	66%	4.9 dB
9201	RG-58/U	.193	20 AWG solid bare copper	Solid polyethylene	78% bare copper braid	Black PVC	52Ω	66%	4.2 dB
9258	RG-8X Mini-8	.242	16 AWG stranded bare copper	Foam polyethylene	95% bare copper braid	Black PVC	50	80%	3.3 dB
8214	RG-8/U	.403	11 AWG stranded bare copper	Foam polyethylene	97% bare copper braid	Black PVC	50Ω	78%	1.7 dB
8237	RG-8/U	.405	13 AWG stranded bare copper	Solid polyethylene	97% bare copper braid	Black PVC	52Ω	66%	1.9 dB
8267	RG-213/U non- contaminating	.405	13 AWG stranded bare copper	Solid polyethylene	97% bare copper braid	Black, non-contaminating PCV	50Ω	66%	2.1 dB
9913	Low loss semi-flexible RG-8/U	.405	10 AWG stranded bare copper	Semi-solid polyethylene	100% bonded foil plus 90% tinned copper braid	Black PVC	50Ω	84%	1.3 dB
9913F7	Low loss flexible RG-8/U	.405	11 AWG stranded bare copper	Gas-injected foam polyethylene	100% bonded foil plus 90% tinned copper braid	Black Belflex®	50Ω	84	1.5 dB
9251	RG-8A/U non- contaminating	.405	13 AWG stranded bare copper	Solid polyethylene	97% bare copper braid	Black non-contaminating PVC	52Ω	66%	1.9dB
8241	RG-59/U	.242	23 AWG solid bare copper	Solid polyethylene	95% bare copper braid	Black polyethylene	75Ω	66%	3.4 dB
8213	RG-11/U	.405	AWG 14 solid bare copper	Foam polyethylene	97% bare copper braid	Black polyethylene	75Ω	78%	1.5 dB
8238	RG-11/U	.405	18 AWG stranded tinned copper.	Semi-foam polyethylene	97% bare copper braid	Black PVC	75Ω	66%	2.0 dB

PREASSEMBLED COAXIAL HOOK-UP CABLES

9349 3 ft. of RG-58A/U low-loss foam with PL-259s
installed **\$16.99**
9350 15 ft. of RG-58A/U low-loss foam with PL-
259s installed **\$18.99**
9352 50ft. of RG-58A/U low-loss foam with PL-259s
installed **\$28.99**
9354 50 ft. of RG-8/U low-loss foam with PL-259s
installed **\$52.99**
9355 75 ft. of RG-8/U low-loss foam with PL-259s
installed **\$74.99**
9356 100 ft. of RG-8/U low-loss foam with PL-259s
installed **\$89.99**

See Belden in the Price Guide



For quick, clean preparation of coaxial cable without
damage. Insert coax, turn clockwise 4 or 5 times.

24-7735P for RG-58, RG-59, RG-62..... **\$21.99**
24-7736P for RG-6, RG-59, 8281..... **\$21.99**
24-7739P for RG-8, RG-11, RG-213..... **\$28.99**

ROTOR CABLE

8448 Standard duty, 8 wire For runs up to 100 ft.
Consists of (6) #22 and (2) #18 AWG tinned copper
conductors. PVC insulation and PVC jacket.
9405 Heavy duty, 8 wire. For runs over 100 ft.
Consists of (6) #18 and (2) #16 AWG tinned copper
conductors. PVC insulation and PVC jacket.
8484 Standard duty, 4 wire Consists of (4) #20
AWG tinned copper conductors. PVC insulation and
PVC jacket.

ANTENNA & GROUND WIRE

8000 #14 AWG (7x22) stranded bare copper-cov-
ered steel antenna wire.
8018 #8 AWG (solid) soft annealed aluminum
ground wire – multiples of 50 ft.



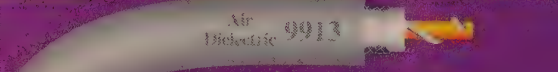
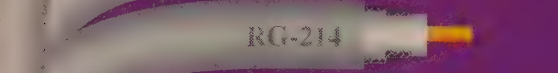
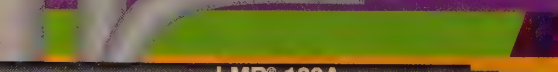
Black Dacron® Polyester Antenna Rope Construct-
ed of strong, double braid Dacron® Black for UV pro-
tection. Resistant to mildew & abrasion. Ties and
cuts easily, sealing effectively with a hot knife.

100' 100 ft., 3/32" **\$6.99**
100' 3/16 100 ft., 3/16" **\$14.99**
100' 5/16 100 ft., 5/16" **\$19.99**
350' 350 ft., 3/16" **\$39.99**



Low cost, low loss flexible LMR® cable!

for HF through Satellite Bands

	Diameter in Inches	Jacket Material	Shielding (dB)	*Attenuation (dB/100')			
				30 MHz	146 MHz	440 MHz	2.4 GHz
 LMR® 900	.870	Black PE	90	.29	.65	1.2	2.9
 LMR® 600	.590	Black PE	90	.42	.95	1.7	4.3
 LMR® 400	.405	Black PE	90	0.7	1.5	2.7	6.6
 Air Dielectric 9913	.405	PVC	90	0.8	1.5	2.8	7.5
 9914	.403	PVC	90	1.0	2.1	3.8	8.7
 RG-214	.425	PVC-IIA	60	1.2	2.8	5.1	13.7
 RG-213	.405	PVC-IIA	40	1.2	2.8	5.1	13.7
 LMR® 240	.240	Black PE	90	1.3	3.0	5.2	12.7
 RG-8/X	.242	PVC	40	2.0	4.5	8.1	21.6
 LMR® 200	.195	Black PE	90	1.8	3.9	6.9	16.5
 LMR® 195	.195	Black PE	90	2.0	4.4	7.7	18.6
 RG-58	.195	PVC-IIA	40	2.5	6.1	10.4	35.0
 LMR® 100A	.105	Black PVC	90	3.9	8.8	15.6	38.9
 RG-174	.110	PVC-IIA	40	5.5	13.0	25.0	75.0

LMR features: Watertight foam polyethylene dielectric • Non-kinking • EZ install connectors

*Use calculator at www.timesmicrowave.com for loss at any frequency

AES® Stocks LMR-400 Series Only.



TIMES

MICROWAVE SYSTEMS
A Smiths Industries company





Permanent Mobile Hard Mounts. A top quality SO-239 or NMO-type antenna mount with 14 ft. of RG-58A/U coaxial cable and PL-259 connector attached. Easily snakes around a vehicle to the best operating position. Perfect for MFJ *RuffRider™* or other brands of mobile VHF/UHF antennas.

MFJ-341S for SO-239 base connector..... **\$19.99**

MFJ-341M for NMO base connector..... **\$19.99**

Van Gorden Engineering

LADDER LINE

450 OHM 100 18 ga. 100' insulated..... **\$14.99**

450 OHM 14 100 14 ga. 100' insulated. **\$29.99**

450 OHM 1,000 18 ga. 1000' insulated **\$109.99**

450 OHM 14 1000 14 ga. 1000' insul. **\$229.99**

WHITE NYLON ROPE

NR-100 100' roll, antenna guy rope **\$4.99**

NR-1,000 1000' roll, antenna guy rope..... **\$44.99**

N CONNECTOR

N CONNECTOR Male connector for Belden 9913 and 8214 coax **\$4.99**

PREASSEMBLED COAXIAL HOOK-UPS

8X-3ST 3' RG-8X w/silver-teflon PL-259s..... **\$8.99**

8X-6ST 6' RG-8X w/silver-teflon PL-259s. **\$10.99**

8X-12ST 12' RG-8X, silver-teflon PL-259s. **\$11.99**

8X-25ST 25' RG-8X, silver-teflon PL-259s. **\$15.99**

8X-50ST 50' RG-8X, silver-teflon PL-259s. **\$24.99**

8X-75ST 75' RG-8X, silver-teflon PL-259s. **\$31.99**

8X-100ST 100' RG-8X, silver-tef. PL-259s. **\$37.99**

213-25ST 25' RG-213, silver-tef. PL-259s. **\$25.99**

213-50ST 50' RG-213, silver-tef. PL-259s. **\$38.99**

213-75ST 75' RG-213, silver-tef. PL-259s. **\$54.99**

213-100ST 100' RG-213, sil.-tef. PL-259.. **\$72.99**

BALUNS & INSULATORS

Hi-Q 1:1 or **Hi-Q 4:1** Baluns
Replaces center insulator • 1:1 or 4:1 impedance ratio for matching unbalanced coaxial cable to balanced antennas • Covers 3 to 40MHz with a 1.5kW rating • For dipoles, yagis, inverted vees and doublets • Reduces feedline radiation for more power into antenna, and reduced TVI/BCI problems • Built-in DC ground reduces static noise and protects against lightning • SO-239 connector, center support eye hook • Weatherproof..... each **\$14.99**

ANTENNA CENTE Hi-Q

Antenna Center Insulator
• Insulator only, no balun
• Replaces egg-type center insulator • Small, rugged, lightweight, weatherproof, SO-239 connector, center supporting eye hook..... **\$6.99**

ANTENNA END IN End insulators.... pair **\$4.99**

DOG BONE Antenna insulators..... each **99¢**



We accept I.M.P.A.C.® Government Credit Cards

CABLE X-PERTS, INC.

9913FX Flexible Low Loss
50 Ω Coaxial Cable

- Designed for directional antenna systems.
- Special Semi-Solid Polyethylene Dielectric.
- Velocity of Propagation 84%.
- Double Shield 100% bonded Foil + 95% TC Braid
- Non-Contaminating-Direct Burial Jacket.
- 1.6dB/100ft @ 150 MHz (2 meters)
- 2.8dB/100ft @ 450MHz (70cm)
- Uses PL259 connectors, or "N" (special size)
- Long Life Performance and Reliability.
- Greatly improves performance on 2 meters & 70cm over conventional coaxial cables.

9913FX per foot..... **59¢**

9913FX 500 500 foot roll **\$269.99**



W2VS ANTENNA TRAPS

Add these traps to your dipole for multiband operation on two to six bands. For example: add the 40 meter pair (KW-40) and get 40 and 80 meter operation. For 10, 15, 20, 40, 80 and 160 meters, add all five pairs – 33 combinations! Selecting traps is easy. Just list the bands you want to cover, listing the highest frequency band first. You will need a pair of traps for each band except the one with the lowest frequency. Cost/pair.

KW-80CW 80m CW **\$48.99**

KW-80F 80m phone **\$48.99**

KW-40 40 meters..... **\$42.99**

KW-30 30 meters **\$42.99**

KW-20 20 meters..... **\$41.99**

KW-17 17 meters..... **\$41.99**

KW-15 15 meters..... **\$41.99**

KW-12 12 meters..... **\$41.99**

KW-10 10 meters..... **\$41.99**

W2AU FERRITE BALUNS

W2AU 1:1 or **W2AU 4:1** or **W2AU Beam** Balun Replaces center insulator and provides a smooth transition from unbalanced coaxial transmission lines to balanced antennas; dipoles, quads and yagis. Produces proper current distribution resulting in reduced feedline radiation for maximum power transfer, gain and reduced TVI/BCI. DC grounded for lightning protection, convenient center eye hook for support. Usable from 1.8-40MHz, 2KW PEP..... ea. **\$24.99**

W2DU NON-TRANSFORMER CHOKE BALUNS

W2DU HF for 1.8-30MHz, **W2DU VHF** for 30-250MHz, **W2DU BEAM** for 40-10m. High efficiency, transformerless 1:1 baluns. The HF model is the only one available that works on 160 meters! They all handle a VSWR up to 5:1 at the legal power limit, allowing use with antenna tuners. The VHF model eliminates the usual rod and tube hardware balun assembly normally used at those freq..... ea. **\$26.99**

Used & Demo

Equipment lists

Updated regularly on the web.

Check them out and order **On-line**



High Performance Baluns • State-of-the Art • 0.5 to 50MHz performance with advanced toroid transformer • 3KW SSB rated • Extended performance in hostile environments • Stainless steel hardware • Heavy-duty body materials • Military grade internal components • Dimensions: 3"dia. x 7"

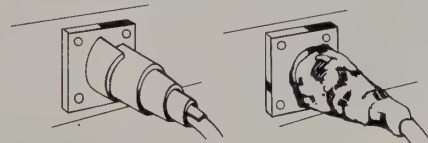
B11W10-50 1:1, dipole..... **\$49.99**

B11Y10-50 1:1, yagi..... **\$49.99**

B41Y10-50 4:1, yagi..... **\$64.99**

B41LW10-50 4:1, ladderline to coax **\$64.99**

ANTENNA, COAX & CONNECTOR PROTECTION PRODUCTS



UNV 104 Hand Moldable Plastic for Antenna Component Protection The quick and effective way to seal and protect all types of coaxial fittings, baluns, antenna parts and connectors. Simply wrap it on like regular tape, then mold it to any shape. It adheres tightly to metal, vinyl and polyvinyl coax outer jackets. Stays flexible and sealed at any temperature for years to resist moisture penetration and deterioration. Its permanent flexibility makes it possible to remove and re-install fittings, then re-seal just by re-forming the same material. Non toxic and non-contaminating roll, 1/2" w x 60" **\$2.99**

PENETROX™

PENETROX® A Recommended for use on aluminum-to-aluminum and aluminum-to-copper connectors, on bare conductors, and bus bars. Good for all voltages. Assures a high conductivity joint by sealing out air and moisture to prevent corrosion and reformation of oxide film. Apply to mating pieces of antenna components, tubing, etc. during assembly to provide a non-corrosive, low resistance and air tight seal. Makes later disassembly a breeze (4oz bottle) **\$12.99**



Cross Devices

STUF Dielectric Water-proof Connector Filler Seals out moisture. High purity macroscopic foam that dielectrically simulates the coaxial cable core. Fill coax connectors and tighten. The filler material hydraulically channels into all connector voids and points of moisture entry. Non-hardening, easy to remove. No silicones, or other additives to harm coax cable material..... (tube) **\$4.99**



ANTENNA TUNERS

922 VHF/UHF Dual Band Antenna Tuner Great for HTs, mobile rigs or amps up to 150W. Using the included tool, adjust your antenna system for a low SWR on VHF from 136-175MHz and UHF from 420-460MHz. Meter reads both SWR and power in two ranges: 60W or 150W. Only 4 x 2 x 1 1/4" - carry it in your car, on camping trips, etc **\$79.99**

945E Mobile Tuner Covers 1.8-30 MHz, and rated at 300W PEP. Matches coaxial cable only. Extends mobile antenna bandwidth and eliminates having to stop and adjust the whip length when making frequency changes. Lighted Cross-Needle SWR bridge & Power meter with 50/300 and 5/30W ranges. 8" w x 2" h x 6" d **\$99.99**

941E Versa Tuner II Covers 1.8-30 MHz and rated at 300W PEP. *Matches everything!* - coaxial fed dipoles, vees, whips, verticals, beams, random wires and balanced lines, has a built-in 4:1 balun. Lighted Cross-Needle SWR/Power meter with 300/50W and 30/5W ranges. Convenient 8-position antenna selector for 2 coax lines, random wire or balanced line or an external dummy load. 10 1/2" w x 2 1/2" h x 7" d **\$109.99**

934 Antenna Tuner/Artificial Ground Makes a random wire an effective antenna. Combines the best features of the MFJ's 941E and 931 into one unit. A full-featured 1.8 to 30MHz, 300W antenna tuner with Cross-Needle meter and *Ground Matching* knob that lets you switch in inductance to bring an attached random length wire to a low impedance current point, forming an artificial ground. 10 1/2" w x 3 1/2" h x 7" d **\$169.99**

948 Has all the features of the 941E but without the dummy load. Has larger lighted peak reading Cross-Needle SWR/Power meter **\$119.99**

949E Deluxe Versa Tuner II The same power, tuning and switching capability as the 941E. Has a larger, lighted peak or average reading Cross-Needle SWR/Wattmeter. *PreTune™* feature allows off-the-air tune-up into a built-in 50 ohm dummy load. 10 1/2" w x 2 1/2" h x 7" d. **\$139.99**

969 Deluxe Versa Tuner II Covers 6 thru 160 meters and rated at 300W. Features a roller inductor coil with a spinner knob and 3-digit turns counter. Lighted peak or average reading Cross-Needle SWR/ Wattmeter with 30/300W ranges. Tunes coaxial cable, random wire or balanced feedline, has a built-in 4:1 balun. QRM-Free *Pre-Tune™* feature allows off-the-air tune-up into a built-in 50 ohm 300W dummy load. Convenient 8-position antenna selector. 10 1/2" w x 3 3/8" h x 9 1/2" d. **\$189.99**

962D Versa Tuner III Covers 1.8-30 MHz and rated at 1.5KW PEP. Matches coaxial fed antennas, random wire or balanced line, has a built-in 4:1 balun. Lighted peak or average Cross-Needle SWR/Wattmeter with 200/2000W ranges. Six position selector for two coax lines (direct or thru tuner), random and balanced lines. 10 1/2" w x 3 3/8" h x 15" d **\$249.99**

986 Differential-T Tuner™ Covers 1.8-30MHz, rated at 3KW PEP. Uses a broadband T-network with roller inductor and differential capacitor. Tunes most antennas using only two knobs. Lighted peak or average reading cross-needle SWR/wattmeter with 200/50W and 2000/500W ranges. Inductor spinner knob, 3-digit turns counter, 6-position antenna selector, ext. dummy load switch, 4:1 balun. 10 1/2" w x 4 1/2" h x 15" d **\$299.99**

989C Versa Tuner V Covers 1.8-30 MHz and rated at 3KW PEP. Super duty components. Matches nearly every type of antenna. Roller inductor with spinner knob and three-digit turns counter. Lighted peak or average reading cross needle SWR/wattmeter with 200/2000W ranges. Built-in 50Ω 300W dummy load, 3KW 4:1 balun and six-position antenna selector. 10 1/2" w x 4 1/2" h x 15" d **\$319.99**



AMERITRON



ATR-30 True Legal Limit™ Antenna Tuner Covers 1.8-30MHz, including all MARS and WARC bands. Designed for sustained RF output of over 1500W CW and 3000W SSB, also 160m. Uses High-Q, high-current, edge-wound arc-free roller inductor with super heavy-duty 500pf capacitor in T-match network. Matches nearly any type of antenna using either coax or balanced feedlines. Cross-needle peak-reading SWR/wattmeter with 3000/300W ranges measures peak or average forward/reflected power plus VSWR, illum. Includes three-core choke balun, six-position antenna switch and 6:1 vernier reduction drives, turns counter. Optional external 12 VDC or internal 9V battery required **\$549.99**

Palomar Engineers



PT-340 Tuner-Tuner Eliminate QRM, overheated final tubes and devices by adjusting your station antenna tuner without transmitting. Installs permanently between rig and antenna tuner. Just turn it on, and listen to the noise output in your receiver, then adjust your station tuner controls for a dip in the noise (a null). Covers 1.7 to 30MHz. Uses 9V battery. Dimensions: 6" w x 5" h x 3" d **\$99.99**

VECTRONICS

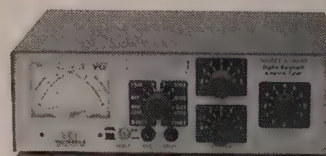


ANTENNA TUNERS

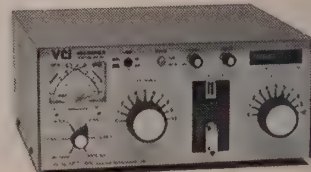
VC-300M Mobile Tuner Compact, lightweight and economical for base or mobile use. Tunes verticals, dipoles, inverted Vs, beams and mobile whips fed by coaxial cable. Also tunes open wire feeders, balanced lines, or single wires. Covers 1.8-30 MHz at 300W continuous power. The dual-movement cross-needle meter simultaneously monitors RF power output and SWR. Size: 7 1/4" w x 3 1/2" h x 8 1/2" d, 2 1/2 lbs **\$99.99**



VC-300DLP Antenna Tuner A quality, economical tuner. Covers 1.8-30MHz at 300W continuous power capability from 3.5-30MHz and 150W on 1.8 MHz. Built-in dummy load, dual-movement cross-needle peak or average reading meter. Compatible with almost any antenna - coax-fed, balanced or single wire. Built-in 4:1 balun and 6-position antenna switch. 10 1/2" w x 9 1/2" d x 3 1/2" h, 3 1/2 lbs **\$149.99**



VC-300D Antenna Tuner Same functions and specifications as the VC-300DLP above, but has the additional capability to show a peak power indication by using an instantaneous responding digital bargraph meter display. A LEVEL and DELAY control has been added to calibrate the display to the meter, and to vary the delay response **\$179.99**



HFT-1500 Antenna Tuner Rated for 1500W from 1.8-30MHz; 1000W (2KW PEP) on 160 and 10M. Features a cranked continuous roller inductor with a numerical turns counter and vernier tuning on the antenna and input capacitors. The dual-movement cross-needle meter shows average forward and reverse power and SWR while a 21-segment bargraph indicates the peak power. A true RF directional coupler sensor is used for the wattmeter circuitry. Includes a built-in 4:1 balun for balanced antenna systems and six-position antenna selector switch. Size: 5 1/2" h x 12 1/2" w x 12" d, 10 lbs **\$399.99**

we have a

SECURE web site
at **www.aesham.com**



ICOM

AH-2B Antenna Element Provides 7-50MHz mobile operation when used with the AH-4 antenna tuner. Includes a sturdy bumper mount, 8.2 foot antenna and necessary hardware..... **\$299.99**



AH-4 Automatic Antenna Tuner Fully automatic - covers all amateur bands from 3.5MHz through 54MHz with a 23 ft. or longer wire antenna, or 7-54 MHz with optional AH-2B antenna element. Compact yet durable, it measures only 6.7" w x 2.7" h x 9" d for easy installation in a variety of locations - outdoors, on a back porch or in your vehicle. Weather-resistant construction, using rubber gasket seals, enables operation in all conditions. Handles 120W PEP, requires only 5-15W for tuning. Designed for use with ICOM HF transceivers. Just push the transceiver [TUNER] switch and the AH-4 automatically adjusts to the minimum SWR in less than 2.5 seconds. Up to 45 memory channels store settings to provide 1-second re-tuning. Supplied with mounting kit, 16 ft. control and coaxial cables, PL-259s. Requires 13.8 VDC..... **\$319.99**



MB-V-A Heavy-Duty Antenna Tuner 1.8 to 30 MHz continuous tuning. Silver plated variable inductor with 25:1 vernier dial. 7kV variable capacitor and 15kV switch selected fixed output capacitors. Tunes most antennas 1/4-wave length or longer from 40-2000Ω (some may not tune at 1.8 MHz). Automatic SWR metering without calibration. Separate automatically switched 300W/3KW RMS wattmeter. Quality 2 1/2" backlight meters continuously display SWR and power. Silver plated 5-position pushbutton antenna switch selects from four antennas: two coaxial, single wire and balanced line, and bypass. Trifilar-wound 3KW toroid balun provides balanced output from 200 to 1000Ω, and unbalanced output down to 20Ω. Requires 9V battery for metering and external 12VDC for meter lights. 14" w x 6 1/2" h x 12 1/2" d, 18 lbs..... **\$879.99**

DC SALES



TENNA HITCH A heat treated, high strength aluminum bracket with insulated 3/8" x 24 mounting stud. Installs under the ball of any Class-I or II hitch. Handles the largest mobile antennas, and does not interfere with trailer towing capability. No holes to drill. All hardware is supplied..... **\$35.99**

MFJ MFJ ENTERPRISES, INC.

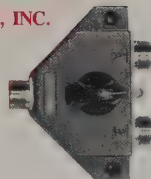
COAXIAL SWITCHES

1702C Antenna Switch Two positions plus center ground, 50Ω. Rated to 500MHz with <0.2dB loss, 2.5KW PEP or 1 KW CW. >60dB isolation @ 300MHz or >50 dB @ 450MHz. Unused terminal automatically grounds for lightning protection..... **\$24.99**

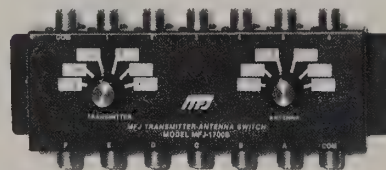
1702CN Lowest loss on UHF. Uses Type N connectors which are good up to 1.1 GHz..... **\$34.99**

1704 Antenna Switch Four positions, plus center ground. 50Ω, rated to 500MHz with <0.2dB loss. Handles 2.5KW PEP, 1KW CW, >50dB isolation @ 500MHz. Includes a replaceable lightning protection device..... **\$64.99**

1704N with Type N's..... **\$74.99**



1701 Antenna Switch Six positions, for 50-75Ω systems. Rated for 2KW PEP or 1KW CW from 1.8-30MHz. Unused positions are grounded for lightning protection. 10" w x 3" h x 1 1/2" d..... **\$49.99**



1700B Antenna and Transceiver Switch Select up to six antennas and six rigs in any combination - tuner, SWR meter, linear, etc. Can be left in line to operate with any combination 50 or 75Ω. Handles 2KW PEP or 1KW CW from 1.8 to 30MHz. Unused positions are automatically grounded for lightning protection. 10" w x 3" h x 1 1/2" d..... **\$79.99**



270 Lightning Surge Protector Safeguard your ham gear from damage due to dangerous static charges and lightning induced surges. Replaceable ultra-fast gas discharge tube safely shunts up to 5000 amps of peak impulse current to an independent ground. Rated to 400W PEP, usable up to 1000MHz **\$29.99**

ANTENNA MOUNT

310 HT Antenna Window Mount Clip Your HT rubber duck antenna radiates poorly inside your car due to the shielding effect of the roof, doors, etc. Detach the duck from your HT and install on this handy BNC window mount clip. It holds your antenna securely on the outside of your car's window where it can radiate freely. It's quick and easy to install and remove. Comes with 10 ft. feet of flexible mini-coaxial cable..... **\$14.99**



AMERITRON

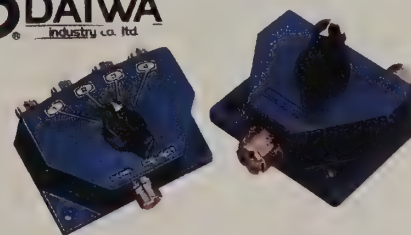
REMOTE CONTROLLED SWITCHES

RCS-4 Select up to 4 different HF antennas while using just one coaxial feed line, and no additional control cable is required. The weatherproof switch box locates out on the tower, mast or other remote location. The control box locates at your operating position and switches antennas with a control voltage routed directly through the coaxial cable. 1.8-30MHz, 2KW..... **\$129.99**

RCS-8V Independently or simultaneously select up to 5 different antennas using just one coaxial feed-line and 8-wire control cable. Internal wiring allows user to ground or float unused terminals as required. Rated at 5KW below 30MHz, and 1KW up to 150MHz..... **\$139.99**



DAIWA Industry Co. Ltd



CS-201 2-Position Coaxial Switch (right) A high quality coaxial switch with excellent high frequency RF characteristics due to cavity and heavy diecast metal construction. Frequency range up to 600MHz with less than 0.12 VSWR, less than 0.2dB insertion loss and 60dB isolation between terminals. Rated at 2.5 KW PEP or 1KW CW. Auto grounding of unused terminals, SO-239 connectors..... **\$26.99**

CS-401 4-Position Coaxial Switch (left) Same features as CS-201, but rated to 800MHz..... **\$149.99**

WA1FFL



Ladder-Loc® Center Insulator & Support Provides a convenient means of attaching 450Ω ladderline to various dipole antennas. This sturdy support minimizes feedline flexing at the antenna feedpoint and ensures a long lasting, trouble-free installation. A top attachment point is provided for attaching a center support rope. UV stabilized for long life..... **\$12.99**

Used & Demo Equipment lists

Updated regularly on the web. Check them out and order **On-line**



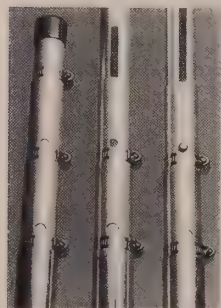
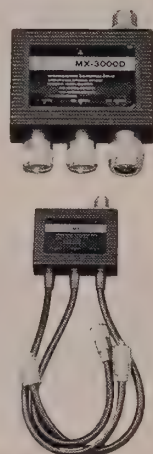
For duplexer and triplexer prices, see the Price Guide under each respective manufacturer.

DUPLEXERS

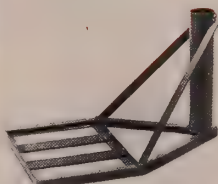
Type	Leads	2m/440	2m/220	440/1200	HF/6 to 440	HF to 6/2m
S0239 PL259/PL259	No	Comet CF4160K Diamond MX72D MFJ 916	Diamond MX214D			
S0239 PL259/Nmale	No	Comet CF4160I				
S0239 S0239/S0239	No	Comet CF4160J Valor D270				
S0239 PL259/PL259	Yes	Comet CF416A Comet CF530 Diamond MX72H	Comet CF142 Diamond MX214	Comet CF360A	Comet CF706A Diamond MX62M	
S0239 PL259/Nmale	Yes	Diamond MX72N Yaesu AD3				
Nfemale PL259/Nmale	No	Comet CF416C Comet CF416W				
Nfemale Nmale/Nmale	Yes			Comet CF4130A Diamond MX37		
Nfemale Nmale/Nmale	Yes			Comet CF413A		
PL259 S0239/S0239	Yes			Comet CF360B		

TRIPLEXERS

Type	Leads	HF/6/2/440/1200	HF/6/2/440	2/220/440
Nfemale PL259/Nmale/Nmale	No	Comet CFX4310B		
Nfemale PL259/PL259/Nmale	No	Comet CFX4310C Diamond MX3000D		
S0239 PL259/PL259/PL259	Yes	Diamond MX2000	Comet CFX514	Comet CFX324A Diamond MX324
S0239 PL259/PL259/PL259	No		Comet CFX5140 Diamond MX2000D	
Nfemale PL259/PL259/Nmale	Yes	Comet CFX431B Diamond MX3000	Comet CFX514N	
Nfemale PL259/Nmale/Nmale	Yes	Diamond MX3000N		
S0239 S0239/S0239/S0239	No		Comet CFX5140 Comet CFX514J	



NEW WAVE Antenna



PORTABLE COLLAPSIBLE MASTS

For Portable or Temporary antenna installations 7-section, telescoping masts manufactured from 6061-T6 polished aircraft aluminum with a 2" to 1 1/4" taper. Light-weight, easily raised by one person at ground level in seconds. Each section joint has a 4" overlap and snaps into place. Rotates at any section along its length, or securely locks into place. Snap-on antenna and park-on steel mount options.

ADVENTURER 47" to 12 ft, 4 1/2 lbs **\$109.99**

TRAVELER 59" to 19 ft, 6 1/2 lbs **\$124.99**

ROVER 71" to 26 ft, 8 1/2 lbs **\$149.99**

EXPEDITIONER 83" to 33 ft, 10 1/2 lbs... **\$174.99**

EXPLORER 95" to 40 ft, 12 1/2 lbs **\$199.99**

BIG FOOT Park-on steel mount. 8 1/2 lbs. **\$119.99**

SNAP ON MOUNT Antenna Mount Attach antennas to portables without tools. Adds 12" **\$19.99**

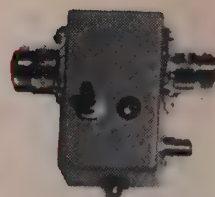


PT-3 Preamplifier Covers 160 to 6m, useable with either a receiver or transceiver. Tunable low noise dual-gate FET circuit provides >20dB gain, low N.F. and improved spurious and image rejection. RF sensed switch with variable delay automatically bypasses to antenna on transmit. Second rcvr or ant. capability. 12V DC. or use P-12T AC adapter (\$9.99) 2 1/2" h x 8 3/4" w x 6 1/2" d **\$124.99**



TPA Tunable Preamplifier/Active Antenna Use as a preamplifier to improve the gain of a receiver, or as an indoor active antenna. Covers 0.22 to 30MHz in 5 bands. A dual-gate FET device provides an excellent N.F. and >20 dB gain. As a preamplifier, the input matches most antennas; long wire, 300Ω and random lengths. When no external antenna is available, the preamplifier's built-in 30" collapsible whip gives great results. Uses 9V battery or PT-9T AC adapter (\$9.99). 1 1/2" h x 8" w x 6 1/2" d **\$76.99**

MIRAGE



GaAsFET Preamps for 10, 6, 2, 220 and 440 High gain, ultra low noise GaAs FET preamps improve weak reception by providing from 15-25dB of receive gain with a N.F. of <0.6dB.

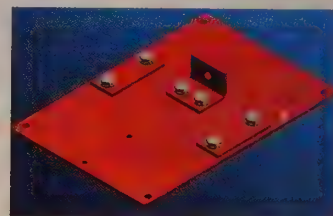
In-line design with auto transmit and receive switching for up to 160W throughput. Choose in-shack model (KP-1), or mast mount model (KP-2) providing added benefit of reducing feedline loss.

KP-1 models ea. **\$129.99**

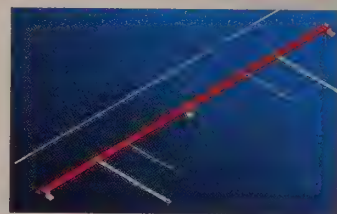
KP-2 models ea. **\$179.99**



GBIS18114AE 1/8" Copper Entrance Ground Bar Kit Installs at shack entrance, making a short connection to the ground rod system. Holds up to 5 PolyPhaser IS50-type lightning impulse suppressors. Insulated stand-off brackets allow attaching and insulating of ground bar from mounting surface. Two terminal lugs and hardware included to accommodate grounding conductors, size range 1/0 stranded to #6 solid **\$27.99**



GP1868.78AE 1/8" Copper Single Point Ground Panel Kit Provides single-point grounding for two transceiver lines and rotor control cable. Installs at tower base or on outside wall. Sized to fit inside a NEMA-4X style box for weather proofing. Tapped holes and hardware provided for mounting a PolyPhaser IC-RCT rotor control protector and up to two IS-50 series coaxial protectors. Sandwich plates and hardware included **\$54.99**



GBIS18148AE 1/8" Copper Station Ground Bar Kit Installs at back of operating desk. Allows grounding of individual components to a common point preventing multiple ground paths and daisy-chains. Accepts a heavy ground conductor to be routed to station ground or entrance ground bar. Includes 2 heavy 12" straps for transceivers or amps and 2 light duty 1/4" straps for accessories, plus extra 1/4" strap and lugs for added assemblies **\$64.99**
See Harger in the Price Guide for Weather-proof Enclosure and Heavy-duty Grounding Lugs.





PolyPhaser Corporation's coaxial impulse suppressors are a unique line of patented products. Hermetically-sealed voltage sensitive gas tubes are used with additional components to assure that surge voltages and currents formed differentially on the coax are not conducted to the equipment input. There is no dc continuity from center pin to center pin on our dc blocked protectors.

Other gas tube protectors have dc continuity through their center pins and share the energy with the equipment before the gas tube turns on. Quarter wave stub protectors are also dc coupled devices. There is dc continuity between their center pins and the equipment input.

A PolyPhaser dc blocked protector only lets through our rated specification (low milli-, or microjoules). Peak voltage let-through is also significantly less than dc continuity protectors. PolyPhaser's measured let-through energy and voltage is the industry's lowest.

- Multi-strike capability with low-strike throughput energy
- Aluminum enclosure
- VSWR: ≤ 1.1 over its frequency range

● FLANGE MOUNT

IS-50UX-C0 Frequency Range: 1.5MHz to 400MHz; Max. Power: HF 2kW, VHF 375W, UHF 125W

IS-50UX-C1 Frequency Range: 50MHz to 700MHz; Max. Power: VHF 375W, UHF 125W

IS-50NX-C2 Frequency Range: 125MHz to 1000MHz; Max. Power: VHF 375W, UHF (low) 125W, 800MHz to 1GHz 50W. Type N connectors

● BULKHEAD MOUNT

IS-B50LU-C0 Frequency Range: 1.5MHz to 400MHz; Max. Power HF 2kW, VHF 375W, UHF 125W

IS-B50LU-C1 Frequency Range: 50MHz to 700MHz; Max. Power VHF 375W, UHF 125W

IS-B50LN-C2 Frequency Range: 125MHz to 1000MHz; Max. Power VHF 375W, UHF (low) 125W, 800MHz to 1GHz 50W. Type N connectors

● ROTOR CONTROL PROTECTOR

IS-RCT Provides protection for rotor controllers, motors, control box and other nearby equipment. EMP rated faster than other gas tubes with mounting stud. 7.5" h x 3.25" w x 2.5" d.

● IN-LINE PHONE LINE PROTECTOR

IS-SPTL Multi-stage protection, with large bandwidth and fast response time. EMP rated. For telephone trunk lines — handles standard ring voltages to 105Vrms. Handles surges up to 36kA.

● POWER LINE EXTENSION PROTECTOR

In-line, multi-stage EMP rated protectors provide multi-strike power line protection, filtering, and proper grounding when equipment use requires an extension cord. Two outlets, master on/off switch, circuit breaker for added protection. All aluminum-grounded enclosure. 4.25" wide.

IS-PLDO-120-15A 15' cord, 120V @ 15A

IS-PLDO-120-20A 6' cord, 120V @ 20A

● GROUNDING PANEL

CU-SPGP A .062" thick copper plate mounted on a painted 1/2" plywood backing. Mounting protectors & a single ground point established for station equipment. Comes with concrete anchors, all mounting screws, 10' of 1.5" copper grounding strap, 2 brass sandwich plates, and joint compound. 18" w x 12" h; 16" d center mount.

● LOW INDUCTANCE COPPER STRAP

Copper strap has an advantage over wire when used for grounds, as it has lower inductance, and cannot be fused open by lightning. For example: 1.25" strap has a lower inductance than #2.0 stranded wire. It's easy to cut, solder, etc. Usable above or in-ground applications. 26 AWG thickness (0.0159"). Available in 1.5, 3 & 6 inch widths, and 25, 50, 75 or 100 foot rolls.

PolyPhaser®
CORPORATION

A SMITHS INDUSTRIES COMPANY

www.polyphaser.com

hy-gain

AR-40 Lightweight For large TV/FM and smaller Ham antennas up to 3 sq. ft. windload area when mounted in-tower, or 1.5 sq. ft. mast mounted using supplied lower support bracket. Silent, automatic control box – just dial and touch for desired direction. Accepts masts up to 2 1/2" diameter. Includes light-duty mast support. Dual 12 ball bearing race, disc brake system • Power: 350" lbs. turning, 450" lbs. brake • Control cable: Belden 8448/9405 5-wire • 17"x 8" dia., 14 lbs..... **\$269.99**

CD-45-II Medium Duty For antennas up to 8.5 sq. ft. windload area when mounted in-tower, or 5 sq. ft. mast mounted with supplied lower support. Illuminated directional indicator, separate snap-action brake and rotation switches with disc brake release. Meter face reversible for N or S center scale. Accepts masts up to 2 1/2" dia. Includes light duty lower mast support. Dual 48 ball bearing race, disc brake system • Turning/brake power (in./lbs.): 600/800 • Control cable: Belden 8448/9405 8-wire • 17"x 8" dia., 22 lbs ... **\$369.99**

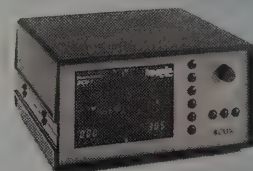
HAM-IV Heavy Duty For medium-sized antennas with up to 15 sq. ft. windload area mounted in-tower, or 7.5 sq. ft. mast mounted with optional lower mast bracket. Illuminated directional indicator, separate snap-action brake and rotation switches. Meter face reversible for N or S center scale. Accepts sizes up to 2 1/2" diameter. • 98 ball bearings, electric locking steel wedge brake system, RF protected • Turning/brake power (in. lbs.): 800/5000 • Control cable: 8-wire – Belden 8448/9405 • 13"x 8" dia., 24 lbs **\$529.99**

HAM-V Heavy Duty Same specifications as the HAM-IV but powder coated and includes the DCU-1 digital control box..... **\$899.99**

HDR-300A Deluxe Extra Heavy-Duty In tower mount only – for large antenna arrays up to 25 sq. ft. windload. Digital directional indicator accurate to 1 degree. Separate brake and rotation controls. Accepts masts up to 3" diameter. • 138 ball bearings, solenoid operated locking brake system, RF protected • Turning/brake power (in./lbs.): 5000/7500 • Control cable: Belden 8-wire control cable • 7"x 9" x 10"h, 55 lbs **\$1229.99**

T-2X Tailtwister Extra Heavy Duty For large antennas up to 20 sq. ft. windload when mounted in-tower, or 10 sq. ft. mast mounted with optional support bracket. Illuminated directional indicator, separate snap action brake & rotation control switches. Meter face reverses for N or S center scale. Accepts masts up to 2 1/2" dia. Triple 138 ball bearing race, electric locking steel wedge brake • Brake/turning power (in./lbs.): 9000/1000 • Control cable: Belden 8448/9405 • 14"x 9"x 9" dia., 28 lbs..... **\$619.99**

T-2XD Tailtwister Extra Heavy Duty Same as T2X, but with DCU-1 digital control box. **\$979.99**



DCU-1 Digital Rotor Control A compatible control for T-2X and Ham-IV. Automatic operation of brake and rotor. with Automatic 8-second brake delay. Six presets for favorite beam headings, 1 degree heading accuracy and 360 degree choice for rotational midpoint. RS-232 computer port, compatible with many logging and contest programs..... **\$619.99**

Channel Master



9521 Drive Unit: Handles small VHF, UHF and TV antennas • One-piece cast aluminum housing • Heavy-duty rotator motor, three-wire control • Wind-tested brake pad • Durable powder-coated finish • Precision-cut gear system • Built-in steel thrust bearings **Control Unit:** Compatible with most universal remote controls • Infrared remote • 69 channel programmable memory • Auto synchronization for pinpoint accuracy • Direct access via channel number or compass heading **\$99.99**

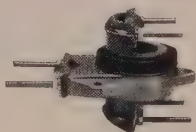
9515 Drive Unit: Looks similar to 9521, but has stronger gearing and housing to handle UHF or VHF arrays and large TV antennas with a windload of less than 5 sq. ft. **Control Unit:** Manual control, no remote **\$129.99**



PHILIPS

U-105 Antenna Rotator featuring a one-piece cast aluminum housing, large bearing surfaces, reinforced mast support and a ball bearing for the vertical load. Precision-cut, hardened steel drive train and high torque — well equipped to handle small to medium VHF or UHF amateur and the largest TV and FM arrays. Control unit is smooth and quiet, synchronized with the drive by synchronous motors • 360° +5°-0, 70 second rotation • 8 ft./lbs. rotation torque • Maximum vertical load: 100 lbs. • 1 1/2" to 2" diameter mast size • 4-wire control cable - Belden 8484 recommended • 7" w x 5 1/2" d x 2 1/2" h • 10 lbs (rotator and control)..... **\$69.99**

TB-105 Support Bearing for extra-sturdy installation when using the U-105 rotator. Relieves wear and tear on the drive unit imposed by wind loads. All ball bearing design, weather-tight seal. Installs on support mast, above the U-105..... **\$18.99**



L.L. GRACE

SATELLITE TRACKING WITH YOUR PC

GRA KCT Kansas City Tracker Package A hard/software package that connects directly to a rotor controller and IBM XT AT, or clone. Controls antenna array, letting the PC track any satellite or orbital body • Includes custom serial interfaces • Does not use COMM ports • Runs in "spare time," letting the PC run other programs at the same time (Pop-up windows allow for review/change of current and upcoming parameters) • Load the tables with more than 50 satellite passes using QuikTrak or GrafTrak • Use pop-up to work an antenna rotor (compatible with all DX logging programs) • Morse-code sender section announces rotor position and status • Hardware consists of half-size interface card that plugs into a PC • Includes interface cable, connector, software, Yaesu/Kenpro 5400/5500/5600 cable and rotor interface option (connect any rotor) • Compatible with DOS 2.00 or higher **\$229.99**

GRA KCT/T Kansas City Tracker Package Plus Tuner The tuner option provides automatic doppler-shift compensation for digital satellite work. Compatible with most rigs and controls a radio thru the radio's serial computer port or the up/down mic-click interface. Perfect for low-orbit digital satellites like the NOAA and Microstat satellites..... **\$319.99**

UNDECIDED? THINK GIFT CERTIFICATE! 1-800-558-0411

K-Factor: Multiply turning radius times weight; add K-Factors for each antenna in multi-antenna installations. The results of the calculation should not exceed the K-Factor rating of the rotator.

YAESU Rotators – precision designed for a wide variety of antenna installations • Strong, weatherproof, die-cast aluminum enclosures • Permanently lubricated for years of smooth, quiet operation • 450° Rotation • Selectable north or south center • Quiet, gear reduction braking • 117/220 VAC • Fits most USA-made tower shelves. Recommended Belden cables listed below.

G-2800DXA (left) The top-of-the line rotator for extra heavy-duty applications. Total rotation range 450°, with presets • 34 sq. ft. wind load • K-factor of 6870 ft. lbs. • 1808 ft. lbs. of stationary torque • Rotation torque: 57.8-181 ft. lbs., rotation speed and torque vary with the speed control setting • Maximum vertical load of 661 lbs. • $\pm 1/2^\circ$ backlash • $1\frac{1}{2}$ –2" mast size • 48-150 second 360° rotation • Optional GS-232A computer interface • Requires 6-wire cable • 8" dia. x 13" h • 13.2 lbs. **\$1139.99**

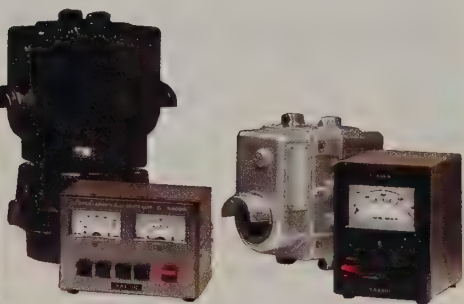


G-800SA (left) High performance for medium-duty applications. Total rotational range 450°, No presets • 17 sq. ft. wind load • K-factor of 1299 ft. lbs. • 288 ft. lbs. of stationary torque • Rotation torque: 43-79 ft. lbs., rotation speed and torque vary with the speed control setting • Maximum vertical load of 440 lbs. • $\pm 2^\circ$ backlash • $1\frac{1}{2}$ –2" mast size • 44 second 360° rotation • Quick-disconnect plug • Requires 5-wire cable • 7" dia. x 12" h • 7.5 lbs. **\$339.99**

G-450A (middle left) For HF/VHF light to medium-duty applications, without presets • 10 sq. ft. wind load • K-factor of 722 ft. lbs. • 217 ft. lbs. of stationary torque • Rotation torque: 43 ft. lbs. • Maximum vertical load of 220 lbs. • $1\frac{1}{2}$ –2" mast size • 53 second 360° rotation • Requires 6-wire cable • 7" dia. x 12" h • 7 lbs. **\$259.99**

G-1000DXA (middle) High-performance for medium and heavy-duty applications. Total rotational range 450°, with presets • 23 sq. ft. wind load • K-factor of 2020 ft. lbs. • 433 ft. lbs. of stationary torque • Rotation torque: 43-79 ft. lbs., rotation speed and torque vary with speed setting • Max. vertical load: 440 lbs. • $\pm 2^\circ$ backlash • $1\frac{1}{2}$ –2" mast size • 35-74 sec. 360° rotation • Opt. GS-232A interface • Requires 5-wire cable • 7" dia. x 12" h • 7.7 lbs. **\$519.99**

G-800DXA (right) High-performance for medium-duty applications. Total rotational range 450°, with presets • 17 sq. ft. wind load • K-factor of 1299 ft. lbs. • 288 ft. lbs. of stationary torque • Rotation torque: 43-79 ft. lbs., rotation speed and torque vary with the speed control setting • Maximum vertical load of 440 lbs. • $\pm 2^\circ$ backlash • $1\frac{1}{2}$ –2" mast size • 35-74 sec. 360° rotation • Opt. GS-232A interface • Requires 5-wire cable • 7" dia. x 12" h • 7.5 lbs. **\$429.99**



G-550 (right) Elevation rotator, for satellite earth station and other space communication antennas • 12 sq. ft. wind load • K-factor of 578 ft. lbs. • 101 ft. lbs. of stationary torque • Rotation torque: 73 ft. lbs. • Maximum vertical load of 440 lbs. • $\pm 3\%$ backlash • $1\frac{1}{2}$ –2" mast size • 67 second 180° elevation • $1\frac{1}{2}$ –1" boom diameter • Requires 6-wire cable • $10\frac{1}{2}$ " dia. x 7" h • 7.3 lbs. **Special \$249.99**

G-5500 (middle right) Azimuth-Elevation rotator combination for satellite earth station & other space communication antennas • 11 sq. ft. wind load • 578 ft. lbs. K-factor • 145 ft. lbs. stationary torque • Rotation torque: 44 ft. lbs. • Max. vertical load: 440 lbs. • $\pm 4\%$ backlash • $1\frac{1}{2}$ –2" mast size • 58 sec. 360° rotation • 67 sec. 180° elevation • Opt. GS-232A interface/C-1000 cable • $1\frac{1}{2}$ –1" boom dia. • Requires 2 x 6-wire cable • 12" dia. x 7" h, 20 lbs **\$629.99**



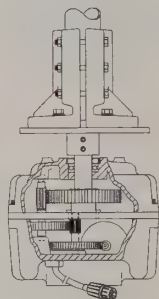
ROTATOR ACCESSORIES

- GA-2500** Tower absorber (G-450A/G-800) **\$79.99**
- GA-3000** Tower absorb. (G-1000/G-2800) **119.99**
- GC-038** Mast clamp (G-450/G-800/G-1000/G-5500) **31.99**
- GC-048** Mast clamp (G-2800) **47.99**
- GS-050** 50mm thrust bearing for any $1\frac{1}{2}$ " to 2" masts **31.99**
- GS-065** 65mm thrust bearing for any $1\frac{1}{2}$ " to 2" masts **47.99**
- GS-232A** Interface for DXA rotators **539.99**
- C-1000** Cable to interface the GS-232A and any SDX rotator or G-5500 **29.99**
- GS-680U** Universal, self-adjust. bearing **99.99**
- SEP KIT** Separation kit for the G-5500 **23.99**



OR-2800PDC Heavy-duty

Rotator Powerful and reliable, rotates multiple HF antennas or large VHF or UHF arrays with ease. The control box provides manual features plus heading preset, 10 programmable presets, programmable ramped start/stop, 1/2-degree target accuracy. Includes RS-232 port for computer control • Precision worm-gear drive, not reversible by mast torque • Non-slip, ductile iron mast clamps • Large drive plate for masts up to 3" • Heat-treated steel gear train, hardened driveshaft • Prop-pitch style torque plate • Fits inside most popular towers and mates to standard towers and rotator plates • Motor-mounted digital pulse switch for accurate, closed loop control and heading display • 35 sq. ft. wind area • 1800 lbs. vertical load • $1\frac{1}{2}$ –3" O.D. mast size • 55-270 second rotation speed • 0.1°/0.5° travel resolution • 110/220V AC, 50/60Hz input • 28-42V DC motor • 153.4" h total, 9" h rotor • 42 lbs **\$1429.99**



ROTOR CABLE

AES recommends you use Standard Duty cable for runs up to 100 feet. For longer runs, to deliver the proper voltage to the rotator, use heavy duty. See Price Guide for a complete list and pricing.

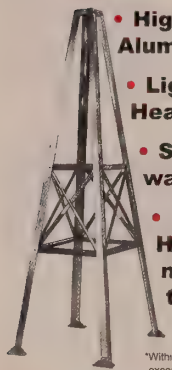
- 8448** Standard duty, 8 wire For run up to 100 ft.
- 9405** Heavy duty, 8 wire. For runs over 100 ft.
- 8484** Standard duty, 4 wire.

WE WANT YOUR TRADE-IN!

We're always looking for Clean, Late model SSB or FM gear. Look over the gear in this catalog. Then call Toll Free and tell the salesperson what item you want and what gear you have to trade.



ROOF-TOP TOWERS



- High Quality Anodized Aluminum/Satin Finish
- Lightweight & Extra Heavy Duty
- Stainless Steel Hardware/ Will Not Rust!
- Ideal for support of Ham Antennas, Scanners, Weather Monitors, AMSAT, etc.!
- Free Shipping*

*Within the 48 contiguous states on products over \$25, except M-1040 and MA-1040 masts



- Contact us for a complete GME catalog - FREE!
- See price list for a list of products and prices.

MODEL	Height	D' Inches	Base Width	Wind Load ²	Max Ant. Load	Ship Weight
RT-424	4.5'	34.75	24"	6sq.ft.	100	18 lbs.
RT-832	8.0'	43.75	32"	8sq.ft.	120	30 lbs.
RT-936	9.0'	43.75	36"	18sq.ft.	130	54 lbs.
RT-1832	17.5'	37.62	32"	12sq.ft.	110	62 lbs.
TB-25	Premium thrust bearing (Max Mast Dia 2.6")					3 lbs.
MC-10	Mast Clamps, 2 required (Mast 1.3"-2.1" Dia)					2 lbs.
LR-8400	Lighting Rod Kit (order ground cable separately)					12 lbs.

1 Distance from top mounting surface to rotor plate. 2 Wind load rating at 87 mph

Tower Accessories

Complete Line of Tower Accessories

Thrust Bearing



TB-25

Premium weatherized thrust bearing that supports rotators and protects them from excessive wear. Six set screws lock mast in place. (Max mast dia. 2 5/8")

Mast Clamp



MC-10

Secure non-rotating masts with our heavy duty mast clamp. Four set screws lock mast in place. (Max mast dia. 2.18") Must use two clamps.

The Hazer Tram System

Imagine never climbing a tower again!
With the Hazer Tram System, you can!

- Eliminates Tower Climbing
- Allows Easy Access to Antennas
- Carries Heavy Loads
- Easy Installation on Erected Towers
- Complete packages start as low as \$274.99

Models available for Rohn 20/25G & 45/55G Towers

HAZERS for Rohn 20/25G & 45/55G			
MODEL	Max. Ant. Load	Wind Ability	Material
H-2	175 lbs.	12 Sq. Ft.	Heavy Aluminum
H-3	150 lbs.	8 Sq. Ft.	Aluminum
H-4	200 lbs.	16 Sq. Ft.	Galvanized Steel
VH8-60	Hazer for 60' Rohn 45G, 22 sq. feet @ 87 mph		
VH9-70	Hazer for 70' Rohn 55G, 18 sq. feet @ 87 mph		

Martin Tower Packages

"Never Climb a Tower Again with the Hazer!"



- Pre-Assembled sections made of strong anodized aluminum or galvanized steel
- Convenient / Affordable tower packages- everything you need!
- No Climbing- includes the world famous Hazer™ Tram System!
- All-bolted construction- no welds to break, stainless hardware
- Safe, Easy "Walk-Up" Tower Installation- No gin poles!
- Lifetime investment- no rust, chipping or freeze breaks
- Quality Engineering & Competitive Pricing!

The Hazer is a unique tram system that rides up & down the outside of your Martin or Rohn tower much like a flag goes up a flagpole. Raise and lower your antennas by simply turning a winch! Work on your antennas whenever you need, when you want! Hazer 2, 3, 4, 5 & 6 wrap around the tower and work best on towers up to 50 feet. Hazer 7 & 22 incorporates its own separate track. See price list for additional accessories (lighting rods, thrust bearing, masts). Never climb your tower again. Let the Hazer do the climbing for you!

MARTIN TOWER PACKAGES COMPLETE WITH: 10' sections, footing assembly, hinge base for easy walk-up installation, Hazer (w/cable, winch, etc.), Kevlar Cable guy kit, turn-buckles, earthscrew anchors, grounding kit, stainless steel hardware, and FREE 48 state motor freight shipping!

Complete Martin Tower & Hazer Packages	
M-1330A	30' x 13" Aluminum tower package w/Hazer 5
M-1340A	40' x 13" Aluminum tower package w/Hazer 5
M-1350A	50' x 13" Aluminum tower package w/Hazer 6
M-1850A	50' x 18" Aluminum tower package w/Hazer 6
M-1860A	60' x 18" Aluminum tower package w/Hazer 7
M-1870A	70' x 18" Aluminum tower package w/Hazer 7

Assorted Masts	
M-1040	10' Heavy Duty Galv. Steel Mast (1.92" Dia., 31 lbs.)
MA-1040	10' Medium Duty Alum. Mast (1.92" Dia., 11 lbs.)
M-1049	9' Heavy Duty Galv. Steel Mast (1.92" Dia., 30 lbs.)
MA1049	9' Medium Duty Aluminum Mast (1.92" Dia., 9 lbs.)
MA-5050	5' Light Duty Aluminum Mast (1.33" Dia., 5 lbs.)
MA-1050	5' Medium Duty Aluminum Mast (1.92" Dia., 7 lbs.)

See AES price guide for a complete list of GME Products and Prices!

Request product information online at <http://www.glenmartin.com>



ROHN®

HEAVY-DUTY HDX-SERIES

All steel with X-brace construction for strength that allows a free-standing configuration without guy wires at 70 mph winds with antennas up to 10 sq. ft. wind area and boom lengths not exceeding 10 ft. Galvanized steel provides an attractive and maintenance-free finish. The entire tower can be assembled on the ground and hinged up into position with an optional hinged base, or built vertically, section by section. Supplied with RoXB base stubs for concrete mounting, rotator plate, mast clamp and hardware. All makes of rotators can be installed on the plate inside of the top section. Tubing furnished can be held in place with mast clamp on the top plate to act as a thrust sleeve for a 1 1/2" mast.

Factory Drop Shipped - Truck Collect

Model	Height	Sections	Windload @70mph	Weight	Price
HBX-40/ BXB-6	40'	5	10sq.ft.	276 lbs.	\$490.99
HBX-48/ BXB-7	48'	6	10sq.ft.	353 lbs.	\$653.99
HBX-56/ BXB-8	56'	7	10sq.ft.	444 lbs.	\$820.99

Heavier Capacity Duty HDX - Series

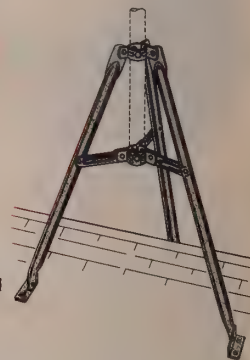
HDHX-40/ BXB-7	40'	5	18sq.ft.	330 lbs.	\$*499.99
HDHX-48/ BXB-8	48'	6	18sq.ft.	422 lbs.	\$816.99

* SALE - limited quantity, Milwaukee ship or Pick-up

EASY-UP

ANTENNA TRIPODS

UPS SHIPPABLE



The use of a self-supporting antenna mount makes a neat and attractive installation without guy wires. EZ-Ups are Heavy-Duty and Self-supporting - made out of 1 1/2" tubular steel with triple corrosion protection inside and out. Double embossed collars with six locking screws hold masts up to 1 1/2". Fast, one-man installation, the legs extend to any rafter spacing. Shipped completely assembled and includes a pitch pad kit and lag screws.

- EZ 48-3ABX** (right) 3 ft. high, 8.5 lbs. **\$24.99**
- EZ 48-5ABX** (right) 5 ft. high, 12 lbs. **\$34.99**
- EZ 516** 5' 16 ga. steel mast (Pick-up only) .. **\$7.99**
- EZ 2924** Heavy-duty Double Strap Chimney Mount (left) Mount includes two "Y" type mounts and 24' of galvanized strap **\$12.99**



We accept I.M.P.A.C.® Government Credit Cards



Check out our full line of accessories including: Tower Motor Drives
5 ft. to 20 ft. Antenna Masts • 20 ft. Chromolly Masts • Thrust Bearings • Mast
Raising Fixtures • Rotating bases • Coax support arms • Limit Switch Packages

MA SERIES CRANK-UP TUBULAR TOWERS

Will handle 10 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
MA-40	40 ft.	21' 6"	2	242	3" sq.	4 1/2"	12" x 12" x 12"	\$ 899.99
MA-550	55 ft.	22' 1"	3	435	3" sq.	6"	18" x 18" x 18"	1499.99
MA-550MDP*	55 ft.	22' 1"	3	620	3" sq.	6"	3' x 3' x 5'	2932.99
MA-770	70 ft.	22' 0"	4	645	3" sq.	8"	3' x 3' x 6'	2529.99
MA-770MDP*	70 ft.	22' 10"	4	880	3" sq.	8"	3' x 3' x 5 1/2'	3999.99
MA-850MDP*	85 ft.	23' 6"	5	1128	3" sq.	10"	4' x 4' x 6'	5391.99

*Standard bases and eave mounts included with all towers (except MA-770, 770-MDP and 850 MDP)

• MDP models complete with heavy-duty motor drive with positive pull down.

FREE STANDING CRANK-UP TOWERS

Will handle 18 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
TX-438	38 ft.	21' 6"	2	355	12 1/2"	15"	3' x 3' x 5'	\$1142.99
TX-455	55 ft.	21' 6"	3	670	12 1/2"	18"	3' x 3' x 6'	1699.99
TX-472	72 ft.	22' 8"	4	1040	12 1/2"	21 1/8"	4' x 4' x 7'	2832.99
TX-472MDP*	72 ft.	22' 8"	4	1210	12 1/2"	21 1/8"	4' x 4' x 7'	4549.99
TX-489MDPL*	89 ft.	23' 4"	5	1800	12 1/2"	25 1/8"	4' x 4' x 8 1/2'	7390.99

*TX-472MDP includes heavy duty motor drive with positive pull down. *TX-489MDPL comes with heavy duty motor drive with dual level wind and positive pull down. MDPL models include fully operational limit switch packages.

FREE STANDING HEAVY-DUTY CRANK-UP TOWERS

Will handle 30 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
HDX-538	38 ft.	21' 6"	2	600	15"	18"	3' x 3' x 6'	\$1477.99
HDX-555	55 ft.	22'	3	870	15"	21 5/8"	4' x 4' x 6'	2569.99
HDX-572MDPL*	72 ft.	22' 8"	4	1600	15"	25 5/8"	4' x 4' x 8 1/2'	6775.99
HDX-589MDPL*	89 ft.	23' 8"	5	2440	15"	30 5/8"	5' x 5' x 8 1/2'	8869.99
HDX-689MDPL*	89 ft.	23' 8"	5	3450	18"	37 1/8"	5' x 5' x 9 1/2'	17,135.99
HDX-5106MDPL*	106 ft.	24' 8"	6	3700	15"	37 1/8"	5' x 5' x 9 1/2'	18,647.99

*Includes heavy-duty motor drives with dual level wind and positive pull down. MDPL models include fully operational limit switch packages. *HDX-689MDPL rated 60 sq. ft. of antenna at 50 mph winds. HDX-5106MDPL rated at 35 sq. ft. of antenna at 50 mph winds

FREE STANDING "LOW-PROFILE" COMPACT CRANK-UP TOWERS

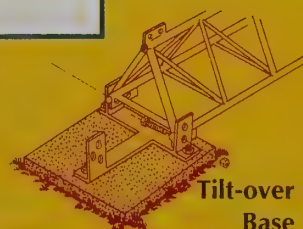
The SS will handle 18 sq. ft. and HD, 24 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
TMM-433SS*	33 ft.	11' 4"	4	315	10"	18"	3' x 3' x 4'	\$1219.99
TMM-433HD	33 ft.	11' 4"	4	400	12 1/2"	20 1/4"	3' x 3' x 5'	1477.99
TMM-541SS	41 ft.	12'	5	430	10"	20 1/4"	3' x 3' x 4 1/2'	1599.99

* Rotators must be top mounted on SS models. Yaesu G800S/SDX will fit in and nest.

*** Any tower purchased with a MDP-750 or MDPL-1000 motor drive MUST be purchased with either the MCL-100 or the RMC-1000.

**SEE
PRICE GUIDE
FOR
COMPLETE
LIST OF
ACCESSORIES**



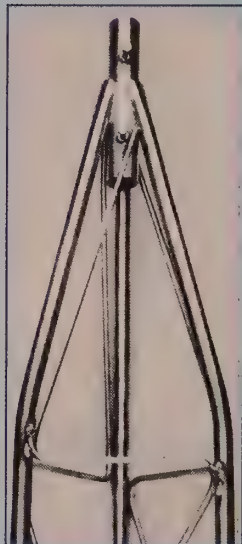
**Tilt-over
Base**

WRITE OR CALL FOR A COMPLETE US TOWER CATALOG - FREE!

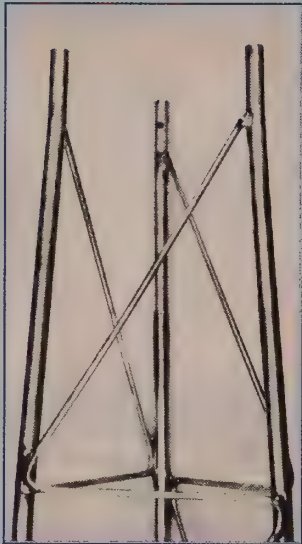
UNIVERSAL TOWERS

FREESTANDING

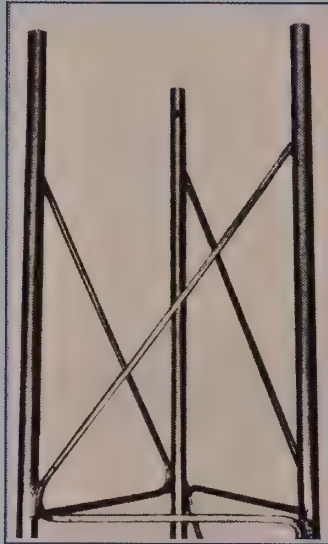
LIGHTWEIGHT • RUST FREE • EASY TO ASSEMBLE • RUGGED STRENGTH
for AMATEUR RADIO • TV • FM • INDUSTRIAL • FIRE • POLICE • MARINE



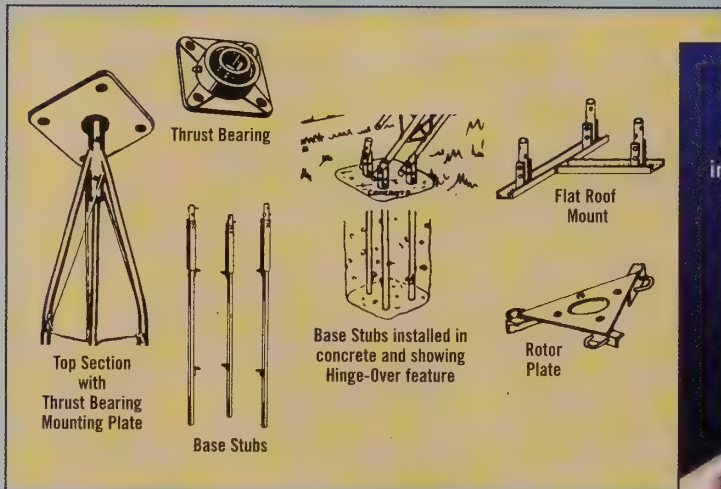
TOP SECTION



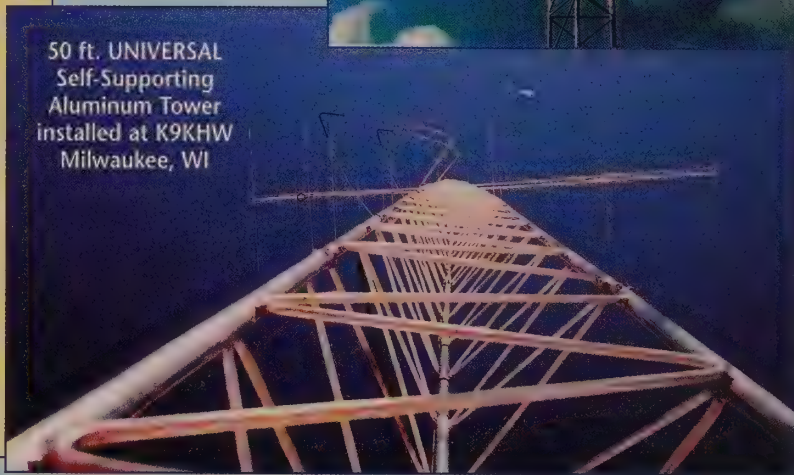
TAPER SECTION



STRAIGHT SECTION



50 ft. UNIVERSAL
Self-Supporting
Aluminum Tower
installed at K9KHW
Milwaukee, WI



Antennas
(2M) M² 2M-5WL
17 elements, 33 ft. boom
(6M) M² 6M-7JHV
7 elements, 31 ft boom
(6M) M² OA-50's
omni, side mount/stacked

Write or
Call for a
complete
UNIVERSAL
TOWERS
Catalog
FREE!

SECTIONS

Universal Aluminum Tower sections are an equilateral triangular welded truss, 10 ft. in length and available 11, 14, 18, 22, 26 or 30 inches wide.

CHOOSING THE PROPER TOWER

- (1) Determine the projected surface area of the antenna that you intend to mount. This figure is often in the literature that comes with the antenna. Otherwise: standard T.V. antennas are about 2 sq. ft. in area; 6/10 meter beams and large T.V. antennas, 5 sq. ft. ; 20/40 meter beams, 9 sq. ft.; large 20/40 meter beams or multiple antenna arrays, 18 to 26 sq. ft. Also, when using a rotator to add 1 sq. ft. plus 1 sq. ft. for the mast to whatever size antenna you intend to use.
- (2) Decide on the tower height that you want. Universal towers are made in 10 foot sections to give you many possible sizes and the ability to add sections later.
- (3) Choose the tower model based on height and windload. The model number is merely the wind loading followed by the height. For example, if your antenna calculation resulted in a tower designed for 5 sq. ft. and you wish it to be 50 ft. high, the model you want is a **5-50**.

No Guys!

Self-Supporting at the Rated Load

BEFORE BUYING A TOWER
Consider the advantages of -

ALUMINUM

It's strong, lightweight, rust free and easy to assemble and erect.

UNIVERSAL offers 10 ft. sections in complete towers ranging from 30 to 100 ft. with a choice of wind load ratings and accessories to meet your specific needs.

The Pouch

A protective carrying case for H.T.'s made of water-resistant neoprene & nylon. "Bungee type" restraining strap. Belt loop has secure "spear-in" clasp.



Make/Model	Pouch#	Price
ADI		
AT-201/401/600	T-2A	17.99
PR-52/222	PR	14.99
ALINCO		
DJ-C1T/C4T/C5T	AF-738	12.99
S11/S41/S46	P-5	14.99
X2T	510	12.99
195T	95T	14.99
180TH/280TH/480T	VX-3T	14.99
V5TDC/V5TH/G5TH	V-5T	14.99
ICOM		
IC-Q7A	508	12.99
T2H	T-2A	17.99
T7H	P-5	14.99
T8A	510	12.99
T22/44A	P-5	14.99
T81	510	12.99
W32A	32-5T	14.99
R3/R10	RC-3	17.99
KENWOOD		
D7A	DTX	17.99
TH-22ATH/42AT	SS	17.99
TH-G71A	G-71	17.99
TH-79A	S-1(2.7w)	17.99
TH-79A	S-2(5.0w)	17.99
VC-H1	S-2	17.99
STANDARD		
C-510A	510	12.99
C-568A	P-5	14.99
YAESU - VERTEX		
FT-23/33	23-33	17.99
FT-50RD	10R	14.99
FT-411MKII/12	2-411	17.99
VX-1R	1R	12.99
VX-5R	5R	14.99
VX-110/150	110-150	17.99
VR-500	508	12.99

ANALYZER POUCH

The original from The Pouch. Clear window over readouts. Back-pocket for accessories. Shoulder strap included. ANALY POUCH \$24.99



ChestPOUCH

Double-ply cordura bib with adjustable, "fits-all" harness.

Extra Pouch for battery. Big pocket for accessories on the back. CHESTB/S \$29.99



POWERPORT™

by
CUTTING EDGE ENT.



CARRYING CASE

HMP WorldPack Backpack

Transport your rig easily and safely while traveling. Small enough to qualify as carry-on luggage. Designed for small HF radios; specifically the IC-706 Series and the FT-100. Clever radio elevator to adjust radio height. Constructed of laminated heavy duty black nylon with 1/4" foam padding. Separate lower pouch for power supply or rechargeable battery with pass through holes for wiring. Comfortable body contoured mesh straps. Pocket in lid to secure mic and exterior pouch and tie downs for antenna. 17" h x 8" w x 3" d..... **\$57.99**

RECHARGEABLE GEL CELL BATTERIES

WorldPack Power Kits Designed to fit perfectly within the WorldPack. 7AH rechargeable gel cell power supply with labeled wire harness, female cigarette lighter plug, DC outlet and charger. Choice of two charger rates. Won't overcharge.

HPP-7A 2-stage, recharges overnight..... **\$63.99**

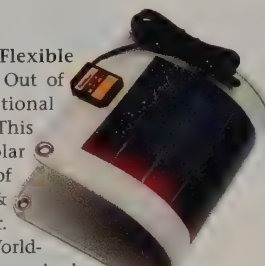
HP-7AF Fast 2-stage charger, will recharge from a full discharged state in 2.5 hours..... **\$119.99**

SOLAR CELLS

PPSC-32 32W Flexible

Roll up Solar Cell Out of reach of conventional power sources? This flexible Roll-up Solar Cell provides 32W of 12V DC operating & recharging power. Will recharge the World-Pack Power Kit in a single afternoon, enabling nearly continuous operation of your radio. Approximately 17" wide by 60" in length. Rolls up into a 10" x 17" package for storage. Completely flexible, waterproof and extremely durable. Versatile - can be mounted on a flat, curved or bendable surface..... **\$394.99**

PPSC-5 5.5W Roll-up Solar Cell Same construction as the 32W solar cell, but its size, 10" x 20", is more suitable for lower use applications. **\$129.99**



PPSCA Cigarette Plug Adapter Required for use with WorldPack Power Kits..... **\$10.99**

OTHER ACCESSORIES

PPMDC DC to DC Regulator Increase the flexibility of your 12V power kit. Adjusts output voltage from 1.5V through 12V. Multiple tips in standard sizes..... **\$22.99**

NCG COMPANY



Power Pocket Provides portable power for emergencies, Hamfests, hiking, etc. The 12V @ 2 amp/hour sealed lead-acid rechargeable battery provides talk time, up to 6 times longer than standard packs. It recharges completely in 6 to 8 hours, with the supplied charger; Partial discharges can be

recharged to 100% without the usual ni-cad memory effect. Radio conveniently plugs into included female adapter socket. Contained in a compact carrying case with a belt loop and shoulder strap. 3 1/2" w x 1" d x 6 1/2" h, 30 oz **\$66.99**

MFJ MFJ ENTERPRISES, INC.



CARRYING CASES

18 HamGear™ Tactical Chest Harness (left) Perfect for rugged use, emergency radio operators and on-the-go hams! Use it for portable hamfest use, DXpeditions, field day, biking, hiking, etc. Made of durable heavy duty twill burlap, this interwoven fabric is water resistant and will cushion blows and scrapes. Adjustable shoulder straps. Harness is firmly held in place by stretchable inter-woven elastic belt with snap hook and adjustable sliders supported by nylon straps. A 5 x 7 inch cargo pocket holds another radio, maps, etc..... **\$29.99**

15 HamGear™ Belt Radio Holder (right) Durable twill burlap pocket with elastic cord and velcro closure easily stretches over any HT. Belt slides easily through 2 x 3 inch loop..... **\$14.99**



CONTEST KEYS

434 Contest Voice Keyer™ New design, micro-processor controlled transformer-coupled - No RFI, hum or feedback. Automatically call CQ, send your call and do contest exchanges in your own voice! • Store frequently used phrases like "CQ. Contest this is AASMT", "You're 59, QTH is Mississippi", etc. Record and play back five natural sounding messages totaling 75 seconds - EEPROM storage • Repeat messages continuously and vary the repeat delay from 3 to 500 seconds • Receive and play back off-the-air signals • Easy to use - plug in an 8 pin microphone cable and plug the MFJ 434 shielded cable into the microphone input • Internal jumpers allow customization to Kenwood, Icom, Yaesu, Alinco and others • Controls tailor audio level to match your voice • Built-in speaker and audio amplifier • Uses 9V battery, 9-15 VDC or 110 VAC with optional MFJ-1312B. 6 1/2" w x 2 1/2" h x 6 1/2" d..... **\$169.99**

73 Remote Control Head with cable..... \$29.99



MAHA

"Your Supplier, Your Partner,
Your Friend!"

POWER SOLUTION

www.mahaenergy.com



Rechargeable NiMH Battery

- Specifically designed for high drain devices like ham radios, GPS, and family radios.
- Redefining market standard with its 1550mAh capacity.
- Recharge 500 to 1000 times.



Universal Drop-in Charger Conditioner

- Universal drop-in design to accommodate various battery packs.
- Advanced battery conditioner to deep condition battery packs.
- FLEX Negative Pulse feature prevents crystallization in batteries.



MH-C888



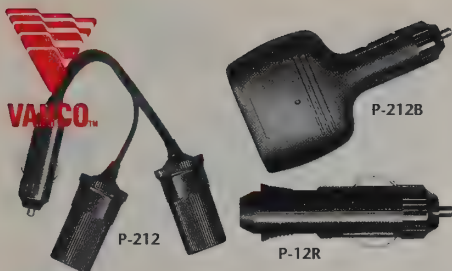
MH-C204F

Intelligent Quick Charger

- Rapid charge AA & AAA NiMH / NiCD batteries in about 3 hours.
- Condition battery to improve performance.
- Can be used in the car with the optional car adapter.

MAHA ENERGY CORPORATION

545-C W. Lambert R. Brea, CA 92821 Tel: 1-800-376-9992 or 714-990-4557 Fax: 714-990-1325



P-212 2-Outlet Cigarette Plug Adapter Enables two 12V accessories to be used from 1 outlet **\$4.99**

P-212B Dual Cigarette Socket Enables two 12 volt accessories to be used from one outlet, comes with replaceable 15 amp fuse **\$8.99**

P-12R 2-Contact Cigarette Plug Solder type with twin contact ears, strain relief and grip end.. **\$1.99**



Q-VIEW QSL CARD HOLDERS

Proudly display your favorite QSL cards in these 12" x 40" clear plastic hanging holders. Each holds 20 3 1/2" x 5 1/2" cards. Open at center to receive cards easily. Pack of three (displays 60 cards) **\$12.99**

UM Unified
Microsystems

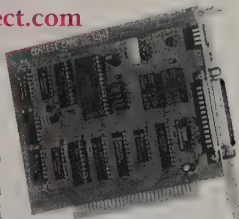
ums@nconnect.com

CONTEST CARD

W9XT Contest Card for IBM™ & PC Compatible

A non-volatile 5" x 4 1/4" card that plugs into a single 8-bit PC slot and provides voice recording, playback and CW keying. Stores a total 60 seconds of voice audio divided into four 15 second messages. Samples at 8 kHz for high quality and natural sound. Does not use any disk space. For CW, the card frees up the PC port, and a relay allows operation with positive or negative keying. Works with all rigs and is compatible with most popular logging programs **\$149.99**

CCC-4 or **CCC-8** Contest Card Cable Semi-kit Wired and tested except for connectors to mic and transmitter. Includes 6 ft. shielded cable, CW keying line and record switch (4 or 8-pin)..... ea. **\$44.99**



MFJ MFJ ENTERPRISES,

BATTERIES



92AA01 Super Ni-MH "AA" batteries - they have twice the power of standard Ni-Cads. Rated at 1300 mAh, these NiMH 1.2 volt batteries greatly extend operating time and do not exhibit the capacity reducing memory effect of Ni-Cads. Perfect for use with the MFJ-259B/269 SWR analyzer with its built-in battery charging circuit. The MFJ-631 or MFJ-632 charger (below) is recommended **\$2.99**

92AA10 Super Ni-MH 10-pack **\$24.99**



CHARGERS

PowerHaus™ Rapid and Trickle battery chargers Perfect for charging Ni-MH or Ni-Cd rechargeable batteries used in your MFJ-259B/269 SWR Analyzer or other equipment. It has a removable dust cover and an AC 12 Volt, 800 mA wall adapter is included. Reverse Polarity Protection and a bright red LED indicator that shows charging status. They Do NOT charge alkaline batteries.

631 Trickle Charger Charges 2 to 4 Ni-MH or Ni-Cd "AA" batteries in 14 hours **\$9.99**

632 Rapid Charger Quick charges 2 to 4 "AA" or "AAA" Ni-MH or Ni-Cd rechargeable cells in one hour or less..... **\$19.99**

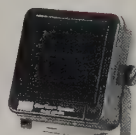


641 RapidBattery™ Universal Chargers Charges Ni-Cad or Ni-MH battery packs. Features both quick and trickle cycles. Circuitry with LED indicators determines when the battery is fully charged, preventing overcharge damage. Universal interchangeable slots for fast, simple drop-in charging. MFJ-641-I2 (Icom BP-131/BP-132), MFJ-641-I3 (Icom BP-173/BP-180), MFJ-641-Y2 (Yaesu FNB-10/11/12/17/27), MFJ-641-Y3 (Yaesu FNB-31/33), MFJ-641-Y4 (Yaesu FNB-40/41/49/V47).... **Closeout \$39.99**

SPEAKERS

281 ClearTone™. Communications Speaker Features a 3" Mylar cone speaker mounted in a well-designed baffle. Greatly improves speech intelligibility in the 600-4000Hz range while reducing undesirable noise, static & hum. 3 1/2" x 3" x 2 1/4" **\$12.99**

382 Deluxe ClearTone™ Amplified Speaker An excellent 1 Watt amplified speaker for QRPers, base station HT users or for operating with rigs requiring more volume. A quality 3 inch speaker provides loud, powerful audio. Volume adjusts from barely audible to high. All metal cabinet, rubber feet and vinyl clad cover. Uses 9V battery (not included) or 110V AC with the optional MFJ-1312B (\$14.99). Connecting cable is included. 3 1/2" h x 1 1/4" w x 4 1/2" d..... **\$39.99**



OTHER ACCESSORIES

701 RFI Free Choke Kit Eliminate common RFI problems by winding offending cables around an RFI suppressing toroid. Effective from 0.5-200MHz. Separates into halves for easy winding of all types of cable: computer ribbon, TV coax, power cord, telephone wire, audio-video cables. Halves mount in snap-together plastic frame. For severe RFI problems and larger cables, multiples can be stacked for more effect. (Pack of 4 toroids) **\$14.99**



624D Deluxe Hybrid Phone Patch Interfaces telephone line with your rig for running phone patches. Easy to use. Jumper selectable for all Kenwood, Icom, Yaesu and Alinco transceivers using an 8-pin microphone connector. Adapts to work with virtually any rig. Uses 12VDC, 9V battery or 110VAC with MFJ-1312B AC adapter (\$14.99). 8" x 2 1/2" h x 6" .. **\$119.99**



931 Artificial Ground Unit Eliminates problems caused by an inadequate ground system when using random length wire antennas. It resonates an additional length of wire to act as a tuned counterpoise. It results in easier tuning, improved efficiency, a better radiation pattern and reduced TVI/RFI. Covers 1.8 to 30MHz, RF ammeter tuning indicator. 7 1/2" w x 3 1/2" h x 7" d. Not for coax fed antennas **\$89.99**



1118 Deluxe Multi DC Outlet Connects to a battery or power supply and provides power distribution to multiple devices. Two pair of heavy-duty 30 amp, 5-way binding posts for transceivers or amplifiers. Individually fused and RF bypassed, rated 35 amps total. Also, 6 pair of RF bypassed 5-way binding posts for accessories, 15 amps total, master fuse. ON/OFF switch, LED power indicator, 0-25V DC voltmeter. Post spacing for dual banana jacks. Includes 6 ft. 8 ga. cable with terminals. 12 1/2" w x 2 1/2" h x 2 1/2" d. **\$74.99**

1116 Similar to 1118 but without 30 amp posts. Provides 8 RF bypassed 5-way binding posts. Voltmeter, ON/OFF switch and fuse **\$49.99**

1112 Similar to 1116 but with 5 posts, no voltmeter or ON/OFF switch..... **\$34.99**



315 Jaws Gripmatic™ Adjustable foam-padded jaws lock HT or cell phone in place and secure it for the bumpiest rides. Protects from damage. Quick release button lets you take the HT with you. Adjustable FlexNeck™ provides convenient positioning. Suction cups mount Gripmatic to window. Tabs give easy release **\$14.99**



Manufacturing
The Best For
Amateur Radio
and Broadcast
Applications

QUALITY • RELIABILITY • SERVICE

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Headquarters: 8200 S. Memorial Parkway Huntsville, AL 35801
Phone: 256-882-1344 Fax: 256-880-8077
Mktg & Eng.: 3000 Alpine Road Portola Valley, CA 94028
Phone: 650-233-0429 Fax: 650-233-0439

AES has the Svetlana 572B in stock. The 4CX250B/7203, 4CX400A, 4CX800A and 8874/3CX400A7 are Special Order. See Price Guide.



Fast Tracker™ Dual discriminator system with Ground Trac® allows you to find more valuables and less trash. Tone discrimination gives low tone for nickels, tabs and most trash items. High tone for most coins and silver. 3 lbs..... **\$89.99**

Sharp Shooter II™ A digital LCD readout system with No Motion All Metals mode. Combines the ease of use with a visual reference that allows the user to determine what type of metal is being detected. 3-tone reference..... **\$249.99**



Quick Draw II™ (right) A powerful Zilog Z-86 computer circuit provides more performance than other similarly priced detectors. Detects coins up to 10" deep and larger objects up to 5' deep. Detects 1/4" gold nuggets up to 4" deep. Three levels of iron discrimination – tune out nails but still detect relics..... **\$199.99**

Land Star™ (left) 3-tone audio discrimination. No Motion All Metals threshold pinpointing and powerful depth capabilities. Notch/auto notch eliminate pull-tabs, but detect nickels and most gold rings. Detects coins up to 12". Manual Ground Balance in All Metals mode adjusts easily and quickly in soil. Has both No Motion and Motion All Metals with iron discrimination..... **\$319.99**

Benjamin Michael Industries
INC.



RC-1A Impedance Matching Patch Cord Provides an impedance match between an 8Ω speaker output and a 600Ω tape recorder input. Built-in attenuator prevents recorder input overload. Includes cables with 3.5mm audio plugs..... **\$19.99**

Nitelogger II Auto Tape Recorder Activator Takes audio from 8Ω source and provides 600Ω match and voice activated relay operation for tape recorder. Connects to radio external speaker jack, and recorder remote and microphone inputs. Create simple crossband repeater by connecting up two handheld radios. AC adapter supplied **\$69.99**

GROTHE

SIRENS & HORNS

VS-2 Emergency Vehicle Siren Designed for the volunteer fireman, a quality-built wail-yelp alarm that delivers big sound performance (120dBa sound level at 4 ft.). Frequency range is 600 to 1200Hz. It is pre-wired with a 3-position switch (Yelp-Off-Wail). High efficiency waterproof horn speaker. Also includes 10 ft. cable, mounting bracket and hardware. 12VDC @ 1.5A, 2.7 lbs **\$89.99**



VS-2LS Siren-Light Combo A one-unit siren and yelp alarm, revolving halogen light and window mount. Fits all cars, slides on top of car window and plugs into cigarette lighter. The power plug contains an "on" LED and three position switch to select Yelp, Off or Wail modes. 12 VDC @ 5A. Specify AMBER, BLUE or RED light **\$299.99**



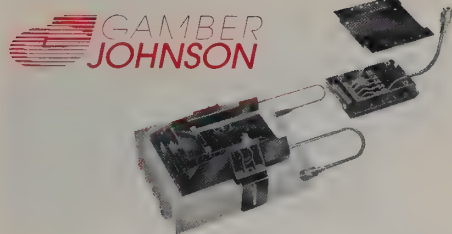
VS-3 Vehicle P/A and Airhorn w/Rebroadcast A big, powerful airhorn sound with four different sounds (no siren) calls attention to your vehicle. Delivers 120dBa level at 4 ft. Locking down the microphone with the supplied rubber band, you can monitor sound from a mobile rig, scanner, etc. via the speaker outside. Includes horn speaker, microphone, electronic center, 10 ft. cable, mounting bracket and hardware. 12 VDC @ 1.5A **\$129.99**

VS-4 P/A Emergency Vehicle Siren Contains P/A, rebroadcast, wail, yelp, pulse and airhorn. P/A override features, plus volume control of all siren modes. Restricts output when operating in people places. Includes horn speaker, microphone, electronic center (3 x 3½ x 2 in.), 10 ft. cable, mounting bracket and hardware. 12V DC @ 1.5A **\$139.99**

WE WANT YOUR TRADE-IN!

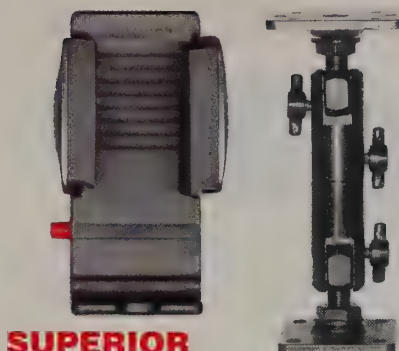
We're always looking for Clean, Late model SSB or FM gear. Look over the gear in this catalog. Then call Toll Free and tell the salesperson what item you want and what gear you have to trade.





SS-100 Super Slide Radio Mounts Convenient, and avoids theft! Radio slides in and out of mount instantly without having to attach or remove cables. The power, ground, antenna, and speaker leads connect and disconnect automatically when installing or removing unit. RF components are designed for a low SWR up to 500MHz. Adjustable bracket adjusts to various case sizes and can be conveniently attached above or below the radio..... **\$79.99**

SS-101 Extra Base Install one in each of your vehicles. Conveniently take your communications gear with you when you change cars..... **\$44.99**



SUPERIOR ACCESSORIES

18640 Universal Phone HT/GPS Holder (left) Keeps your phone, HT or GPS at your fingertips in your vehicle. Press the red button on side of cradle to open the rubber padded grips. Insert unit, squeeze grips and a ratcheting action adjusts to safely hold units 1 1/4 to 2 1/2" wide. Press the button again for quick release. It's 4 3/8" tall, attaches to optional mount or your mount with screws provided..... **\$14.99**

HOU CPM-310 (right) 6" pedestal mount **\$14.99**



SOLDER EQUIPMENT

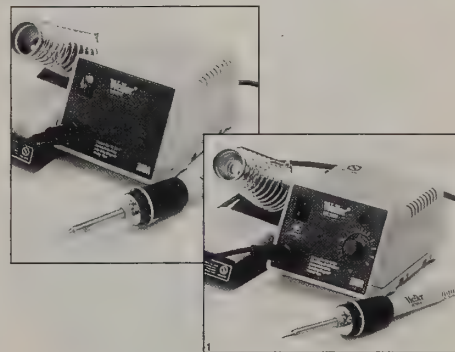
W-60P 60W Pencil-Type Soldering Iron (left) For most circuit work. Supplied with 3/16" 700°F screw-driver tip. 7 1/2" long, 2 1/2 oz., 6 ft. cord, 120V... **\$62.99**

WP-25 25W Pencil-Type Soldering Iron For work on delicate electronic circuits. 750°F tip temperature. 7 1/2" long, 1 1/2 oz., 4 ft. cord, 120V AC..... **\$32.99**

WSTA3 Pyrophen® Butane Soldering Iron (right w/case) Light-weight and completely portable. Operates for up to three hours on a charge of regular cigarette lighter butane. Soldering temperature control is adjustable from 392° to 932°F, with a very fast heat-up time. It's ready to solder in just 30-seconds! Supplied with tips for soldering, hot air (1202°F), and brazing..... **\$99.99**

WST2 Pyrophen® Jr. (middle) A portable mini butane powered soldering iron. Recharges in seconds from a regular cigarette lighter butane container. The soldering temperature is adjustable from 392° to 842°F. Also, hot blow feature (806°F) and torch feature (2372°F). Has handy pocket clip..... **\$87.99**

7200PK Multi-purpose Soldering Gun Compact, lightweight, 75 watts for bigger work. Handles connectors and almost any other heavier soldering job. The flat, self-supporting back acts as a convenient rest when not in use. With carrying case, extra tip and solder. 120VAC..... **\$27.99**



WTCPT Controlled Output Soldering Station (left) This pencil iron is safe for soldering ICs. Power unit with unitized on-off rocker switch with indicator light. Storage tray holds extra tip and cleaning sponge..... **\$119.99**

EC-1002-1 Compact Soldering Station (right) Soldering pencil stand connects to right or left side of unit. Variable temperature, indicator light, self feeding reservoir with cleaning sponge. Tray stores extra temperature sensing tips..... **\$199.99**

Palomar Engineers



VLF CONVERTERS

Receives and converts 10kHz to 500kHz (VLF) to tune on the 80M band. Two models tune this low range on either a General Coverage receiver or Ham band transceiver. Uses 9V battery. 2" h x 4 1/4" w x 5" d.

VLF-A Use with Ham Band transceiver **\$89.99**

VLF-S Use with General Coverage receiver **\$89.99**



RP-001 Mini Multi-Tool

12-function, stainless steel with unique rubberized handle. Folds to 2 1/2".

- Pliers with versatile serrated jaw • Regular and Phillips Screw-drivers • Knife Blade • Scissors • Nail File and Pick • Bottle Opener

Scraper • Wire Stripper • Lanyard Attachment and Key Ring..... **\$6.99**

RP-103 Multi-Tool 12-function, stainless steel with unique rubberized handle. Folds to 4"..... **\$6.99**



Wahl Clipper Corporation

7740 Cordless Soldering Iron Provides tip performance up to 50 watts and over 700°. Contains premium NiCad rechargeable battery for high-rate charging; a partially discharged unit will return to full capacity within 1 to 2 hours, with a complete recharge in 3 to 4 1/2 hours. Replaceable battery and worklight. Comes with recharging stand, fine and heavy tips..... **\$47.99**



7971 SolderPro 50 Usable as a soldering iron, torch, hot knife and heat tool using interchangeable tips (not included) • Heats up from 410°F to 750°F within 10 seconds • Runs up to 30 minutes • No electrical current • Easy refill, powered by standard cigarette lighter butane (not included) **\$19.99**



7974 SolderPro 70 Usable as a portable soldering iron, torch, hot knife and heat tool using interchangeable tips (not included) • Heats up from 410°F to 850°F within 10 seconds • Runs up to 120 minutes • No electrical current • Easy refill, powered by standard lighter butane (not included) . **\$27.99**

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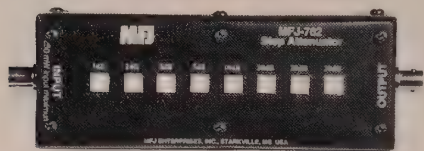
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at **www.aesham.com**

ETA-333 Dual Voltage Foreign Travel Converter Kit Use your 120V electronic items while traveling in countries with 220V current. Two settings: 50W for low wattage items (e.g. shaver), and 1600W for higher wattage items (e.g. hair dryers, curling irons). Kit contains converter unit, five adapter plugs, and compact storage case 5.75" x 4" x 2.6"..... **\$19.99**





113 12/24 Hour Desk Clock Switchable 12/24 hour display • 9-minute ID timer • Alarm function • 9V battery back-up for power failures • 110 VAC, 60 Hz • 9" w x 4" h x 2.5" d..... **\$19.99**



762 Step Attenuator Provides push-button selection of up to 81dB attenuation in 1dB steps • Excellent performance up to 170 MHz, usable to 500 MHz • 50Ω, 250 mW maximum input • BNC connectors with BNC-to-SO-239 adapters included • All metal cabinet, 6.5" w x 2.5" h x 1.5" d .. **\$69.99**



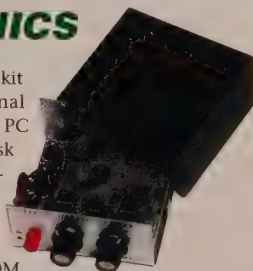
805 Pocket-Sized RFI Detector Track down and eliminate RFI caused by radiating cables and wires. Simply clamp the top mounted current transformer over suspected cable or wire (up to 1/4 inch diameter) to detect RFI causing common-mode currents. Useable from VLF to VHF. Uses 9V battery. 2.25" h x 4.75" h x 1" d **\$79.99**

886 Pocket Frequency Counter Covers 1MHz-3GHz • 300MHz direct count with 0.1Hz/second resolution • 10-digit high contrast LCD with 3/4" digits • Impedance: 50Ω (VSWR @ <2:1) • Sensitivity: 0.8mV @ 100MHz, 7mV @ 300 MHz, 6mV @ 1GHz, 100mV @ 2.3GHz. • Maximum input: 15 dBm • Synchronous detector • Ultra-sensitive RF signal strength LCD bargraph • Four selectable gate times give 1Hz-10Hz resolution (300MHz range) and 10Hz-1000Hz resolution (3GHz range) • Up to 6 hours operation from rechargeable Ni-Cad batteries (included) • Rugged aluminum cabinet, pocket • 2.75" w x 3.25" d x 1.25" d • Includes 110 VAC adapter and telescoping antenna..... **\$109.99**



VECTRONICS

Electronic Kits Each kit features a professional quality epoxy glass PC board with solder mask & screen printed component legend, step-by-step instruction manual and high quality components. • 40M rcvr • Crystal radio • 40M CW transmitter • AM radio transmitter • TV transmitter • Aircraft rcvr • 2M preamp • 220MHz preamp • CW keyer • Battery conditioner • FM broadcast SCA decoder • CW audio filter • CW filter/amp kit • SSB audio filter • Tunable SSB/CW audio filter. See Price Guide



DSP-599zx Digital Signal Processor Superior performance in reducing QRM and QRN. Incorporates the newest high speed CPU that gives unparalleled features and is field upgradeable. The LCD display, push buttons, and "Visible Memory" let you see exact settings of the filter. Optical encoders for continuous tuning of filters.

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TEST INSTRUMENT MODE Provides a audio sine wave generator, audio millivoltmeter and two-tone audio generator for maintenance/setup of audio circuits in radio equipment.

VHF/UHF WEAK SIGNAL AND AURORA Provides remarkable improvement in clarity for weak signal work in the presence of line noise and other interference. And those work a lot of aurora will be amazed at how the DSP-599zx improves the readability of normally distorted SSB signals... **\$399.99**

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SHORTWAVE RECEIVERS

VR-5000 Multimode Scanning Receiver Continuous frequency coverage from 100kHz to 2.6GHz (cellular blocked) • Direct keypad frequency entry and a wide variety of scanning capability • 2000 memory channels, 100 memory banks with alphanumeric labels • Dual receive • Bandscope graphical activity monitor • "Smart Search" automatic memory loading feature • World clock with time zone map • 13.5VDC @ 0.7A • 7.1" h x 2.75" h x 8.0" d, 4.2 lbs.

This device has not been approved by the Federal Communications Commission. This device may not be sold or leased, or be offered for sale or lease, until approval of the FCC has been obtained.



VR-500 High Performance Mini Receiver General coverage 100kHz-1300MHz (cell blocked) • CW, SSB, LSB and USB, AM and FM wide/narrow modes • Includes AM/FM broadcast, HF shortwave up to 16MHz, VHF/UHF TV bands, VHF AM aircraft band, and a wide range of commercial/public safety frequencies • Keypad entry • 1000 memory channels • 100 "skip" memories • 100 dual watch memories • Priority • Powered by 2 "AA" alkalines or 9-16V DC • 2.2" w x 4.2" h x 1" d, 7 oz **Special \$249.99**

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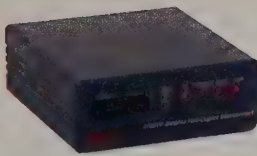
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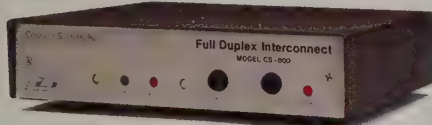
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See Price Guide under RCA for variations on this system.

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TV GUARDIAN Foul Language Filter A small computer that easily connects between your television and VCR. It continually monitors the closed-captioning embedded in the video signal and references each word against an internal directory of over 100 offensive words and phrases. If a word in the directory is detected, the audio is muted. It also removes the offensive word from the closed-captioning and replaces it with a profanity-free version.

Three filter settings: Off, Tolerant Mode and Strict Mode. Three closed-caption options: Off, Display Text During Mute Only and Full-Closed Captioning. All settings and cable connections are capable of being secured under lock and key **\$99.99**

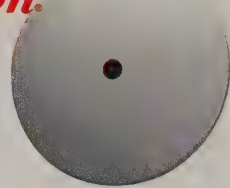
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MIN 100 Television Time Manager Now limit the amount of time children watch television and play video games. Use the TV Allowance™ to set weekly allowable time for TV or video games for each child. Simply plug the TV power

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EAN-3400 HDTV Digital-Ready Amplified Omni-Directional Antenna Perfect for installation on DSS satellite mounting bracket for reception of VHF/UHF channels • 360° signal reception, super low-noise design • Integrated high-gain amplifier (25dB) with variable gain control, 75Ω coaxial system • Paintable, UV-protected, 20½ dia. x 8¼ x 1¼ inches • Includes: AC adapter, DSS mounting brackets and hardware..... **Closeout \$49.99**



EVO-6500 900MHz Wireless Portable Video Observation System with 5" Monitor Set includes one 900MHz camera/transmitter and one 5" black-and-white monitor/receiver. Closed circuit monitoring systems lets you keep an eye on your private property, baby's room, or business. It's fully wireless - transmitting audio and video signals up to 300 ft. (150 ft. thru walls, floors, ceilings). The battery or AC operated camera features: wide-angle lens, infrared LED's for operation in 0 lux environments, two selectable channels (allowing use of multiple cameras), A/B channel selector, built-in microphone, tripod and wall mount. Camera: 2" x 3¼" x 5½" / Monitor: 6" x 8¼" x 6¼" **\$169.99**

EVO-6550 Second camera **\$99.99**





Clip-On TV Antennas TERK's amplified clip-on antennas attach in minutes to any 18" satellite dish and complement it by adding reception of all local VHF/UHF channels. Both models cover channels 2-83 and FM broadcast. They contain an internal 10dB amplifier that minimizes signal loss so signals may be distributed to multiple television sets. Power is supplied by your DSS receiver, thru the cable. 10.25" h x 21.25" w x 3.5" d. Durable powder-coated element and weather-proof amp housing.

TV-41 (left) is for Single-LNB dishes. It has a diplexer that combines DSS and VHF/UHF signals onto a single coaxial cable. A second, separate diplexer splits satellite and local signals so users can switch between satellite channels and off-air local channels by pressing the antenna button on the DSS receiver's remote controller **\$59.99**

TV-42 (left) is for Dual-LNB dishes. It has two built-in diplexers that provide more than one TV set with DSS signals from the dish and VHF/UHF television signals from the antenna **\$79.99**

AF-9330 AM-FM Tower Antenna (right) Built-in amp with gain control improves AM and FM reception. Works with tuners and receivers with 75Ω or 300Ω FM antenna inputs. The AM connection consists of a pair of wires with U-clips. Useful 30-40 miles from the broadcast transmitter **\$24.99**



AF-9925 Powered Stereo Antenna AM-FM(pi) Gamma Loop® FM circuitry improves FM receiver performance by receiving FM frequencies only ... no noise! Receives more local and distant stations while eliminating multi-

path interference and distortion. Outstanding AM reception too! **FM section:** Operating Band: 88 - 108MHz • Amplifier Gain Range: Adjustable, -20 to +42dB, 3dB N.F. • Pickup Pattern: Omnidirectional • Impedance: 75Ω adaptable to 300Ω input with matching transformer included **AM section:** Frequency Range: 500-1700kHz • Gain: +15 dB, 1.5dB N.F. • Output: Twin-lead independent circuitry • Impedance: 75Ω adaptable to 300Ω input with matching transformer included **\$49.99**

TV-50 Amplified Outdoor/Indoor TV Antenna Horizontally-polarized with single element VHF and UHF dipoles for multi-directional TV and FM reception from 54-806MHz. A built-in 11db amplifier can be switched in or out as needed for best performance. The amp is powered from a wall wart terminating in a box containing an on/off switch, connectors & a cable that goes to your TV.

The TV-50 is 76" l x 2 1/2" w x 1 1/4" d and mounts almost anywhere in or outdoors. Includes a 30' cable, 20' cable, 6' cable, (2) 3' cables, combiner/diplexer, splitter/diplexer, coaxial barrel connector and rubber insulators. The diplexers let you run TV signals from your satellite dish and TV50 into your home on the same cable. Install within 55 miles of nearest TV broadcast tower **\$99.99**

TV-MAST Outside mast mount kit **\$19.99**



AM-1000 External AM Antenna A passive, fully adjustable 530-1600kHz AM broadcast antenna that provides improved reception over built-in loops. It is used unattached, next to the radio. Adjustment is accomplished by positioning the unit for best reception, then rotating the tuning dial located at the center of the antenna to match the AM frequency tuned in on the radio. For optimum performance, hook it up directly to an external AM antenna input, if available... **\$49.99**



LF-20 The Leapfrog Wavemaster 20 System transmits picture and sound from your main TV to anywhere in your home. Eliminates the need for expensive and difficult-to-install in-wall wiring. It operates on 2.4GHz for reliable in-home reception up to 100 feet away. It features both standard RF connectors and coaxial (RCA) jacks, for connection to any type of TV set, new or old, as well as any audio or audio/video component. The clear choice for wireless audio/video transmission **\$99.99**

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PROSTAR® 1000 VHF/UHF/FM Antennas Features die-cut impedance correlator that allows close spacing of antenna elements. Manufactured from high tensile aluminum for a strong, compact antenna that will better withstand strong winds and ice loading. Aluminum is protected with high-quality polymer finish.

PR-7010 Metropolitan (bottom) 22 active elements (9 VHF, 13 UHF) • 66.5" boom **\$39.99**

PR-7032 Far Suburban (middle) 33 active elements (13 VHF, 20 UHF) • 103.25" boom **\$64.99**

PR-7042 Fringe (top) 43 active elements (17 VHF, 26 UHF) • 149.75" boom **\$99.99**

SM-2200 Scanner Antenna Vertically polarized, omni-directional pattern. Pass band covers LO, HI and UHF public service bands, including Marine and Aircraft. Coated with a high quality polymer to prevent surface oxidation in any weather. Mounts below TV antenna or on separate mast. Includes 50' of 75Ω coaxial cable with F-connectors attached **\$45.99**

GS-2000 SENSAR® II Amplified Antenna This 68 channel bi-directional antenna provides excellent reception in metropolitan areas 10 to 55 miles away from TV transmitters. Features built-in modular amp with VHF gain of 15.5dB and 19.5dB UHF gain, average, and a -15dB FM trap. Includes 117V AC power supply, hardware and an easy-to-install mast clamp assembly. 46.25" l, 10 lbs **\$79.99**

(shown with optional DS-2000 Universal Mount)

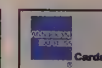
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ABREVIACIONES IMPORTANTES

AMP	Amplificador
ANT	Antena
AT	Acoplador automatico de antena
BATT	Bateria
BKT	Braket de montura
BPR	Guarda choque
CGR	Cargador
CIG	Conector cigarillo
CNTR	Contador
DB	Decibeles
DLX	Lujo
DPLX	Duplexador
EL	Elemento
FREQ	Frecuencia
GND	Tierra
GTR	Labio de ventana
HT	Radio de mano
HVY	Pesado
KYR	Llave
MA	Miliamperes
MAG	Magnetico
MAINT	Mantenimiento
MIC	Microfono
MT	Montura
MTG	Montura
NMO	Montura Motorola
PROG	Programable
PS	Fuente de poder
PWR	Poder
RCVR	Receptor
REM	Remoto
SENS	Sensibilidad
SPKR	Bocina
SPLX	Simplex
SYS	Sistema
TTP	Teclado de botones
VOL	Volumen
W/	Con
WPM	Palabras por minuto
XCVR	Transceptor

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Shipping Equipment for Service

Before sending your item, make sure you contact the nearest AES location and find out the time frame for repairs. If you are concerned about time limitations, this will help you determine where to send the repair and how long your radio will be out.

Always include the following along with the item being shipped:

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- your address, day-time phone number, and email address
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And, always insure your items when shipping.

**CALL 414-358-4087
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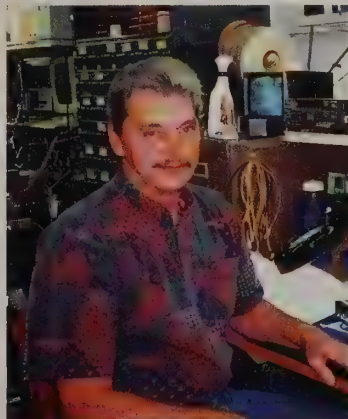
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EXCEPTIONS TO RATES ABOVE

Optional UPS methods (Red, Blue & Orange) and any USPS methods are charged at Regular Rates without any credit for UPS ground rates. COD's are not accepted for these faster methods.

Shipments to APO/FPO go via Priority Mail. Puerto Rico, Alaska and Hawaii can be shipped to via Priority Mail or Blue Label. Orders exceeding UPS or USPS weight, size or value limits will be shipped via Truck or Air Freight collect. Shipping charges taxable in WI, FL & NV.

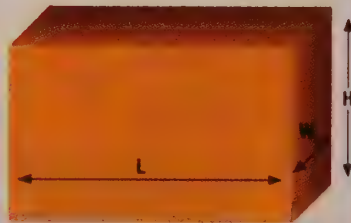
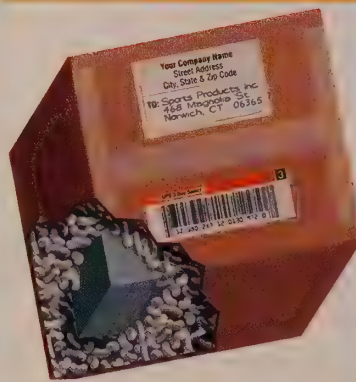
Please see **Policies Page** for complete information.

NOTE: Tracking numbers for out-bound shipments are gladly given. Call our local number, **414-358-0333**, and ask for tracking number service.

Importance of Proper Packing

Packing

When returning heavy, delicate, and expensive equipment, it must be carefully packed in order to avoid damage caused by normal transportation dynamics. In other words, if you put your FT-1000D, TS-940S or AL-1500 in a box with little or no packing beneath it, chances are it will sustain some damage. When contents of packages are damaged, claims will be paid only if the carton and packing meet standards set in the International Safe Transit Association Procedure 1 and 1-A. These standards simply state that cartons and packing should provide reasonable protection to their contents. Ideally, contents should be suspended in the center of the carton by the packing material, no less than three inches on all sides for heavy items. For items heavier than 20 pounds, three inches of foam or crumpled paper should be used instead of polystyrene edge protectors.



$$\frac{L \times W \times H}{194} = \text{Dimensional Weight}$$

Include Information

When you send your well-packed parcel to AES for repair, return or trade-in, be sure to include a letter inside the package. Do not rely on information written or taped on the outside of the carton. This information can be destroyed by moisture or abrasion. In the letter, put your call, name, address, phone and reason for return. You

may also want to include your e-mail address and times you can be reached via telephone.

Dim Weight

When calculating the cost of air shipments, whether Fed-Ex, UPS or other carrier, remember that they use dimensional weight. Dim weights are used to insure adequate revenues per cubic foot of cargo plane space. The formula used to calculate dimensional weight is: $L \times W \times H$ divided by 194. This means a 12" x 13" x 16" box that weighs six pounds will be sent at the twelve pound rate when an air service is used.



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[illegible]

8

☐ Hold this order until you receive and approve my trade-in.

☐ Payment in-full enclosed. Refund allowance when my trade-in is received and approved.

☐ Charge the FULL AMOUNT of my order to my Charge Card and Credit my trade-in allowance when my trade-in is received and approved.

☐ UPS Next Day Air (Red) ☐ 2nd Day Air (Blue) ☐ 3-Day Select (Orange) ☐ Federal Express ☐ RPS ☐ Express Mail ☐ Priority Mail**LINE 4 — Credits:** AES Refund Checks, Gift Certificates or Manufacturer's Coupons (if any)**LINE 5 — Balance**

Account Number

CARD EXPIRES

Cardholder's Name**Cardholder's Signature**

Date _____

LINE 6 — Due AES from previous order (if any)

TOTAL AMOUNT DUE

DO NOT MAIL CURRENCY. Send bank check or money order. Personal check may delay shipping until it clears our bank. Attach remittance to top of order blank.

☐ COD \$6.50 fee per package. *Money Order or Certified Check Only.*

MINIMUM \$20.00 COD ORDER - NO AIR OR PARCEL POST COD's

AMOUNT ENCLOSED

BALANCE DUE (IF ANY)

**BANK
TRANSFER
INFO.**

MILWAUKEE, WI M&I Marshall & Ilsley Bank, Milwaukee, WI. ABA #075000051. Further credit to M&I Northern Bank, credit account #8837510 in the name of Amateur Electronic Supply. **WICKLIFFE, OH** Key Bank, Wickliffe Branch, 29310 Euclid Avenue; Wickliffe, OH 44092. Routing #041001039 for credit to: Amateur Electronic Supply Account #350341000239. **ORLANDO, FL** Bank of America, Fashion Square Branch, Orlando, FL Routing #063100277 for credit to: Amateur Electronic Supply Account #2836088068. **LAS VEGAS, NV** Bank of America, Decatur Meadows Branch. Routing #122400724 for credit to: Amateur Electronic Supply Account #260191226.

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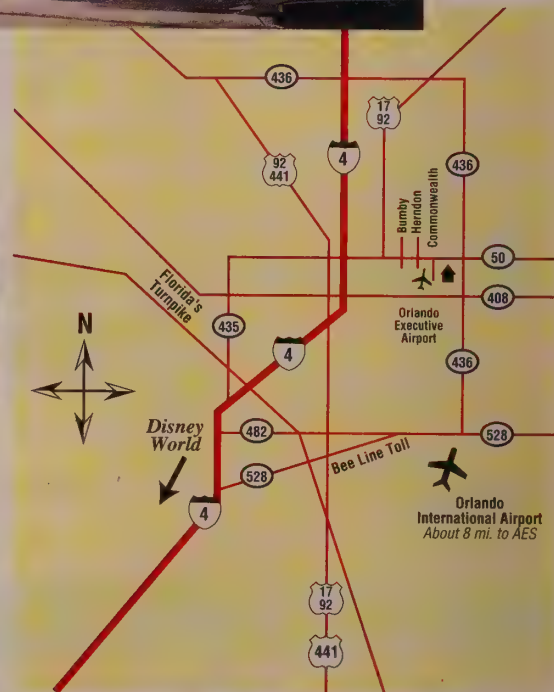
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ALL STORE HOURS

Monday – Friday
9:00 A.M. – 5:30 P.M.

Saturday
9:00 A.M. – 3:00 P.M.



COD ORDERS Minimum COD order is \$20.00, shipment via UPS Ground only (no air or parcel post). The flat-rate, plus a \$6.50 COD fee per package applies. Payment by money order or certified check, only.

DAMAGED ITEMS If the customer discovers a damaged shipment, **THE CARRIER SHOULD BE NOTIFIED IMMEDIATELY**. The merchandise should not be returned to us until notified to do so by the carrier. All packaging materials must be retained including styrofoam peanuts, inner and outer cartons, labeling, etc. for inspection by the carrier or the claim may be denied. With shipments properly packaged (as all our shipments are), the ultimate responsibility for delivery in good condition rests with the carrier.

DEFECTIVE ITEMS Defective items should be returned to Amateur Electronic Supply or the manufacturer for warranty repair or replacement, at our discretion. After processing, we will return it via UPS Ground, prepaid at our expense. If you receive defective equipment, call our Customer Service Department at 414-358-4087 for instructions. Canadians please see "Canadians Note:" under TRADE-INS.

INTERNET ORDERS The customer may order products directly on our web site via our internet order form. If the customer does not have access to the web, but has an e-mail account, the customer may e-mail his/her order making sure the following information is included: full name, call sign (not required to order), phone number, billing address, shipping address, item(s) to be purchased (model number and manufacturer) and method of payment. If paying by credit card, we need the card number and expiration date.

PAYMENT Accepted forms of payment are electronic bank transfer, certified check, personal check, money order, credit card (VISA, MasterCard, Discover, American Express, IMPAC), or COD. The customer's choices of payment methods may depend on amount of purchase or destination of shipment.



We accept U.S. Government I.M.P.A.C.® Credit Cards

PRICING We will pass on decreases in pricing to our customers whenever possible. Due to foreign currency fluctuations, promotions, manufacturers' specials, etc.; prices may vary, so be sure to confirm prices when ordering. All prices and specifications are subject to change without notice. **AMATEUR ELECTRONIC SUPPLY®** is not responsible for typographical errors or omissions.

REFUNDS Amounts under \$5.00 are not refunded unless requested in writing to the Milwaukee headquarters within 12 months.

RETURNS In order to maintain the lowest possible prices, we do not offer a *free trial or evaluation period* on new equipment. If permitted, an **Authorized** return of merchandise for credit (it must be like new with all original packaging) will be subject to a **Minimum 15% Restocking Fee**. The item must be returned within **10 days** after receipt, prepaid, with a copy of the purchase invoice and a letter describing the reason for the return. No returns on antennas, towers,

cable, items drop-shipped from the manufacturer, audio or video tapes, kits, books, or computer software. Canadians please see "Canadians Note:" under TRADE-INS.

SHIPPING Shipping charges, which include adequate insurance, are based on the Order Total at the time of the initial shipment (COD fees not included). The order amount on which charges are determined is pre-coupon and pre-tax. Cancellations on partially shipped orders will not affect the shipping charges. All back-orders from partially shipped orders are shipped PREPAID at the expense of AES® via UPS Ground Service, only.

Shipping calculations on UPS Ground method to the contiguous 48 states have been simplified by utilizing flat-rate categories. Other UPS methods (Red, Blue & Orange) and any USPS methods are charged at regular rates without any credit for UPS ground rates. CODs are not accepted for these faster methods.

Shipments to APO/FPO are via Priority Mail. Orders exceeding UPS or USPS weight, size or value limits will be shipped via Truck or Air Freight collect. Shipping charges taxable in WI, FL & NV.

TRADE-INS Amateur Electronic Supply® accepts trade-ins on new equipment purchases, the worth of which is determined by the electrical and physical condition of the item. Estimates are given assuming the trade-in is in good electrical and physical condition. If it is not, a deduction will be made.

To facilitate a trade-in, the customer can choose one of the following: (A) Purchase the new item(s), send in the trade for evaluation, and have the trade-in amount refunded or credited. (B) Send in the trade and have the order held until the trade-in amount is determined.

When shipping trade-ins for evaluation, use a sturdy carton (double boxing is recommended) and plenty of packing material (see pg. 143). Ship PREPAID & FULLY INSURED. Do not use Bus or Parcel Post. Collect shipments will not be accepted.

AES® assumes no responsibility for damage in transit or for filing of damage claims. Canadians, inquire locally about taxes and/or customs charges before releasing your shipment.

Canadians Note: Returned equipment not originally manufactured in the U.S. will be subject to valuation and custom charges, plus broker's fees. Check customs before shipping anything to us, including new equipment for warranty repair. We will not accept any shipments from outside of the U.S. unless all fees are paid in advance.

BIDS & PURCHASE ORDERS AES® accepts written and signed Purchase Orders from well rated D&B companies, military, schools, colleges, universities and federal, state, county and city Government agencies.

We welcome the chance to bid on your requirements and search the Internet daily for requests from all Government agencies. We are registered with FACNET and accept Government I.M.P.A.C.® charge cards. Net terms available to Government agencies, schools, and companies highly rated in Dunn & Bradstreet.

For more information, please contact Paul Szczerbinski, W9KHO (pauls@aesham.com) at AES® Milwaukee. Toll Free: 1-800-558-0411, Local: 358-0333 or Fax: 414-358-3337

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The "Goldline" Studio Microphone

Goldline microphones are designed to match your operating style. A small "soft touch" micro switch allows you to switch from the Heil Sound broadcast quality wide audio response element for rag chewing to an element tailored to your specific operating style.

Technical Specifications

Model

GM-4	Full range (40 Hz - 16 kHz) HC-4 • (low frequency roll off, 10 dB boost @2kHz)
GM-5	Full range (40 Hz - 16 kHz) HC-5 • (low frequency roll off, 4dB boost @ 2 kHz)
GM-V	High-Z output with bottom octave rolled off, 4dB boost @ 2kHz

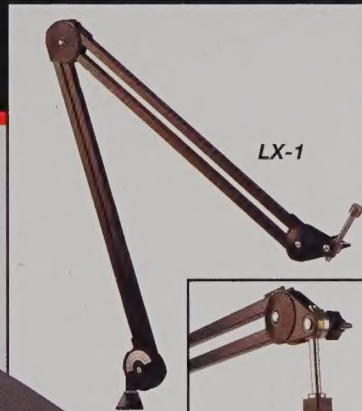
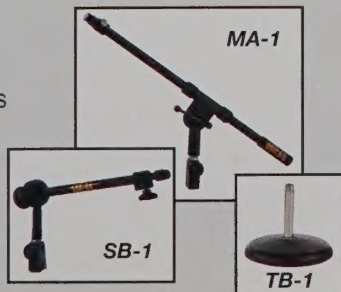
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MA-1. The standard of booms, telescopes to 30 inches.

SB-1. This small mic boom extends to 20 inches.

TB-1. This table base accepts all standard 5/8" 27 threaded clips.



LX-1



SM-1

LX-1 studio boom and SM-1 shock mount

Boom reaches 41 inches without external springs. Balanced for one pound microphone. Shock mount isolates microphone to reduce vibration/noise. Ideal for VOX operation.

Contester and DX Operators

The Goldline GM-4 includes both the flat response element for rag chewing and the HC-4 "Dream Machine" element to cut through the pile-ups.

SSB, AM and FM Users

The Goldline GM-5 includes both the flat response element for rag chewing and the HC-5 element with a frequency response designed to articulate voice clarity.

Vintage Radio Users

The Goldline GM-V is designed for radios such as the Collins S-line, Drake TR-4, Viking Ranger and other rigs of that vintage. The GM-V has an internal custom designed impedance matching transformer and response curve to match these older rigs.



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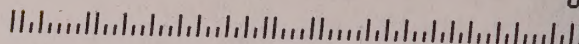
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41 built-in filters - front panel selectable for your convenience - let you pull out weak signals like never before.

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"I was particularly impressed with the '756PRO's front end resistance to overloading. I never heard intermod noises or de-sensing even with the huge pileups we generated. Several times I listened carefully for such problems but they simply weren't there. On CW, once I had picked out a station, I could run the selectivity down to 50Hz and hear ONLY the station I wanted. I have worked pileups from several DX'peditions and have never encountered a radio that held up so well."

- F00AAA member Mike Goode,
N9NS.



dream. Just ask the guys who actually used them - several members of both teams were so impressed with the PRO's performance that they now have '756PROs in their own ham shacks. "It just doesn't get any better than this" - says Glenn Johnson, WØGJ.

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"All seven of the '756PROs worked flawlessly. We ran RTTY perhaps more than 50% duty cycle, and the radios never even got warm at maximum output. The digital filter controls were so easy to adjust and switch...a contesters' dream! We had seven radios, most of the time with three modes at once on any given band. There was NO interstation interference. All of our antennas (except for the 160M & 80M verticals) were within a 75 meter circle."

- A52A member Glenn Johnson, WØGJ.



The IC-756PRO's 5" TFT color display makes the information you need available at a glance. Select from four different colors & seven different fonts.

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